







BOOK NO.

ACCESSION

\* 770 C14 <sup>35</sup>

284094


NOT TO BE TAKEN FROM THE LIBRARY



2  
PERIODICAL DEPARTMENT

36





Digitized by the Internet Archive  
in 2012 with funding from  
California State Library Califa/LSTA Grant



# CAMERA CRAFT

A PHOTOGRAPHIC MONTHLY

EDITED BY

SIGISMUND BLUMANN



VOLUME XXXV  
JANUARY TO DECEMBER

1928

INCLUSIVE

CAMERA CRAFT PUBLISHING COMPANY

411-415 CLAUS SPRECKELS BUILDING

SAN FRANCISCO, CALIFORNIA



# VOLUME XXXV



Adieu, An: Poem .....	James Courtney Challiss	130
Amateur and His Troubles, The .....	Conducted by Sigismund Blumann	
		42, 142, 347, 445, 545
Amateur Photoplay, The .....	Lowell C. Ferguson	575
Association News .....		38, 87, 136, 188, 237, 289, 338, 386, 440, 486, 537, 590
August (Frontispiece) .....	Bianca Conti	352
Award Winners as They Look Now, The .....		434
Baby, Two of Yours (Cover Picture) .....	J. H. Brenenstul	Dec.
Blue Symphony: Poem .....	Verne Bright	166
Book Shelves, Our .....		150, 249, 300, 450, 500, 550
Bromoil Portraits .....	British Journal	275
Bunnies (Frontispiece) .....	Beidler Studios	52
California Snow (Illustrated) .....	Harold Stein	459
Camera: Poem .....	Alice Lawry Gould	371
Camera, Flowers and the (Illustrated) .....	Charles A. Harris	303
Camera, Sheriffing With A .....	Leslie T. White	375
Camera, The: Poem .....	James Courtney Challiss	565
Camera, The Universal (Illustrated) .....	William P. Mattern	463
Camera Week, National .....		216
Carbon Printing by Projection (Illustrated) .....	Thomas Southworth	452, 503
Chief Red Cloud (Cover Picture) .....	John Howard Paine	Oct.
Chit-Chat .....		41, 90, 139, 191, 239, 291, 341, 391, 441, 491, 541, 593
Christmas Greetings to Our Readers .....		589
Cine Department .....		37, 85, 185, 235, 285, 336, 437, 535
Cinematography, Special Filters for (Illustrated) .....	George H. Scheibe	123
Club Notes .....		45, 94, 143, 244, 295, 349, 397, 494, 547
Competition Camera Craft, Advanced .....		30, 31, 80, 81, 131, 132, 180, 181, 230, 231, 280, 281, 330, 331, 380, 381, 430, 431, 480, 481, 529, 530, 584, 585
Competition Camera Craft, Amateur .....		32, 33, 82, 83, 133, 134, 182, 183, 232, 233, 282, 283, 332, 333, 382, 383, 432, 433, 482, 483, 531, 532, 586, 587
Competition Plans, Our New .....		583
Darkroom Outfit in an Overcoat Pocket, A .....	Sigismund Blumann	228
Developed Silver Images, The Color of .....		525
Developer, A Grainless .....	Sigismund Blumann	24
Developer, Pyrocatechin As a Universal (Illustrated) .....	C. Emmermann	560
Developer, The Spent .....	J. G. F. Druce, M. Sc., R. M. Dr.	419
Distant City, The: Picture .....	F. G. Mackintosh	405
Dreams at Dawn: Poem .....	Verne Bright	179
Eadward J. Muybridge, Life and Work of the Late .....	Janet Pendergast Leigh	580
Early Morning Cruise, An (Frontispiece) Pittsburgh Salon, 1928 .....	Paul Wierum	252
Edith Allen (Cover Picture) .....	Nicholas Haz, F. R. P. S.	Mar.
Enlarging Outfit for V. P. Negatives (Illustrated) .....	Anonymous	215
Fishing (Cover Picture) .....	A. C. Bentz	May
Flashlight, Portraiture by (Illustrated) .....	Thomas Southworth	59, 110
French, Ph. D., Wilfred A.: Eulogium .....		436
Gossamer Webs are Fairie's Lace: Poem .....	Emma Irene Werts	417
Gull Flying Seaward, To a: Poem (Illustrated) .....	Dr. Philip Sheridan Haley	323



Haz, Nicholas: A Comet that Proved to be a Fixed Star (Illustrated).....	<i>Sigismund Blumann</i>	3
Index for Year 1928 .....		599
Intensification .....	<i>Prof. Dr. H. D'Arcy Power, F. R. P. S.</i>	126
International Photographic Association.....	100, 200, 300, 400, 500,	598
Italian Switzerland (Illustrated) .....	<i>Dr. H. D'Arcy Power, F. R. P. S.</i>	511
I Tell You, Well.....	<i>Ted McIntire</i>	418
Kira, Hiromu (Illustrated) .....	<i>Sigismund Blumann</i>	353
Lake Louise, Near (Cover Picture).....		Aug.
Los Angeles Camera Club, The All-American Salon of the (Illustrated).....	<i>Milton M. Inman</i>	15
Los Angeles Pictorialists (Illustrated).....	<i>Phil Townsend Hanna</i>	53
Louisville Convention, An Appreciation of the.....	<i>Ida M. Reed</i>	214
Louisville, Some Impressions of the Convention at.....	<i>Ralph Young</i>	273
Master Photo Finishers of America.....	39, 88, 137, 189, 238, 339, 387, 488, 540,	592
Matilija Poppy (Frontispiece) .....	<i>Charles A. Harris</i>	302
Meadow, The: Poem.....	<i>Bert Leach</i>	229
Memory: Poem.....	<i>James Courtney Challiss</i>	515
Miracle, A: Poem.....	<i>Alice Frost Lord</i>	117
Morning on the River: Poem.....	<i>Bert Leach</i>	79
Motion Pictures in Natural Colors.....	<i>Dr. C. E. Mees</i>	403
Moving Pictures for the Amateur and the Professional, Camera Work of (Illustrated).....	<i>Ernest M. Reynolds</i>	20, 65, 161, 224, 271, 324, 377, 427, 471, 519, 566
Music of the Sea, The: Poem (Illustrated).....	<i>James Courtney Challiss</i>	64
National Campaign, Hooking Your Business to the.....	<i>Fred Millis</i>	175
Newberg, Philip .....	<i>Sigismund Blumann</i>	203
New Things on the Market, Some.....	<i>Burleigh Brooks</i>	76
Notes and Comments.....	48, 98, 147, 196, 247, 297, 344, 394, 447, 497, 548,	596
On the Heights: Poem.....	<i>Sigismund Blumann</i>	425
Pacific International Photographers' Association.....	40, 89, 138, 190, 239, 290, 340, 388, 490,	538
P. I. P. A. Fourth Annual Convention Group Picture.....		478, 479
Pari Passu: Poem.....	<i>Sigismund Blumann</i>	528
Photographer, Law for the.....	<i>M. L. Hayward</i>	68, 177, 429, 470
Photographers, A News Editor to.....	<i>Louis Wiley</i>	464
Photographic Digest.....	<i>Edited by Prof. Dr. H. D'Arcy Power, F. R. P. S.</i>	92, 140, 194, 241, 292, 443, 543
Photography, Lecture Notes on (Illustrated).....	<i>Professor Edwin A. Sperry</i>	10, 69, 120, 420, 467, 516
Photography and Progress: Note.....	<i>Sigismund Blumann</i>	466
Photography, Astronomical (Illustrated).....	<i>J. F. Chappell</i>	217, 266, 327, 372
Photography, Black Light (Illustrated).....	<i>Herman Goodman, B. S., M. D.</i>	415
Photography in the Far North (Illustrated).....	<i>G. M. Taylor</i>	407
Photography in Metaphysics.....	<i>Philip S. Haley, Ph. C., D. D. S.</i>	167
Photography in Science (Illustrated).....	<i>Professor Ingo W. D. Hackh</i>	
II Exploring the Microcosmos.....		26
III Exploring the Microcosmos.....		73
IV Finding the Unity of Life.....		170
V Improving the World's Work.....		361, 475, 514
Photography, Still Life (Illustrated).....	<i>Hiromu Kira</i>	358
Pictorial Photographic Society of San Francisco, The Fifth International Salon of the (Illustrated) .....	<i>Sigismund Blumann</i>	553
Pictures and Prints .....	<i>J. V. Ankeney, M. S.</i>	317
Pittsburgh Salon, The Fifteenth: 1928 (Illustrated).....	<i>Ralph B. Bonwit</i>	253, 312
Portrait (Frontispiece) .....	<i>Ralph B. Bonwit</i>	502
Portrait .....	<i>Gerhardt Sisters</i>	426

Portrait (Frontispiece) .....	<i>Philip Newberg</i>	202
Portrait (Frontispiece) .....	<i>B. A. Reade</i>	452
Portrait (Frontispiece) .....	<i>Frank Roshnell</i>	402
Raiatea, Society Islands (Frontispiece).....	<i>R. Scholtz</i>	2
Real Baby, A (Cover Picture).....	<i>G. Ed Williams</i>	Feb.
Real Boy, A (Frontispiece).....	<i>Spencer and Stolte</i>	152
Reflex Back for Your Kodak (Illustrated).....	<i>Edward Hathaway</i>	365
Salon Illustrations:		
Desolation .....	<i>Arthur F. Kales</i>	569
G. K. Chesterton.....	<i>Herbert Lambert</i>	570
Hope .....	<i>Marcus Adams</i>	571
A Bridge—Montenegro.....	<i>Alex Keighley</i>	572
Salon, Invitational .....		518
Sands: Poem .....	<i>Jean L. Allen</i>	14
Scoutmaster's Song of Maine, The: Poem.....	<i>Bert Leach</i>	462
Second Annual Kodak International Salon, The (Illustrated).....	<i>Sigismund Blumann</i>	153
Sensitization of Carbon Tissue, Rapid.....	<i>Thomas Southworth</i>	263
Sensitizers for Linen, Muslin and Silk, Simple.....	<i>Dr. H. O. Mead</i>	424
Shadow Bands When Lighting with Alternating Current, Cause of (Illustrated).....	<i>La Verne Ryder, R. P. S.</i>	277
Silver Cup for 1927, The.....		34
Smith, William Horace: Artist and Gentleman (Illustrated).....	<i>Sigismund Blumann</i>	103
Spring Flowers (Cover picture).....	<i>Beidler Studio</i>	Apr.
Stationery, Photographic Christmas.....	<i>Sigismund Blumann</i>	578
Summer Afternoon: Poem.....	<i>Bert Leach</i>	270
Summer Sport (Cover Picture).....	<i>Dr. J. B. Pardoe</i>	July
Summum Finitum: Poem.....	<i>Sigismund Blumann</i>	366
Table Top Romance (Cover Picture).....	<i>F. L. McKinnie</i>	Jan.
Thanksgiving, For Your (Cover Picture).....	<i>Dr. J. B. Pardoe</i>	Nov.
Thought, Worthy of .....		322
Trail of '98, Along the (Illustrated) .....	<i>C. T. Kirkby</i>	118
Under the Editor's Lamp.....	35, 84, 135, 184, 234, 284, 334, 384, 435, 484, 533,	588
Wah Hing Chang (Frontispiece).....	<i>William Horace Smith</i>	102
Water Logged Boat, The (Frontispiece).....	<i>Anson Herrick</i>	552
World-Blind: Poem.....	<i>James Courtney Challiss</i>	513





SAN FRANCISCO  
PUBLIC LIBRARY

# CAMERA CRAFT

Registered U.S. Patent Office.



TABLE TOP ROMANCE

F. L. McKINNIE

SAN FRANCISCO

CALIFORNIA





# gevaert



## FOR PERFECT PICTURES

### ROLL FILM      FILM PACK

Extreme Speed  
Non-Curling

Orthochromatic  
Non-Halation

IN SIZES TO FIT ALL CAMERAS

### NOVABROM

A fast, general purpose enlarging paper. Ideal for perfect prints by projection methods with minimum time and complete control — requires no special developer.

*Descriptive Catalog at Your Dealer's or*

**THE GEVAERT CO. OF AMERICA, Inc.**

423 WEST 55TH STREET, NEW YORK CITY

CHICAGO, ILL.  
413-21 N. STATE STREET

PORTLAND, ORE.  
345 SALMON STREET

TORONTO, CAN.  
131 YORK STREET

*Dealers in Principal Cities of United States*



We heartily wish you  
**A Merry Christmas**  
and  
**A Happy New Year**



**CAMERA CRAFT PUBLISHING COMPANY**

703 MARKET STREET ~ SAN FRANCISCO, CALIF.







*Raiatea, Society Islands*

*R. Scholtz*



# Nicholas Haz

By Sigismund Blumann

Illustrated With Prints by Nicholas Haz



NICHOLAS HAZ, A.R.P.S.  
Portrait by Jacob Herbert

A very few years ago a picture was shown amongst hundreds at an American exhibition and it attracted such particular attention that ninety-nine of every hundred who attended stopped to look at it a second time and referred to the catalog for the maker's name. They found it to be Nicholas Haz and the Moslem flavor intrigued them the more.

Other exhibitions and salons followed where Haz shone as startlingly and still few if any of the dilettanti or the cognocenti knew who the artist was. A comet had seemingly appeared on the horizon and would probably go across the firmament, follow other comets down the slope of the heavens and vanish, leaving not even the glow of its tail behind it.

A very few years have gone by but years are years and one year of consistent and persistent maintenance of a reputation for great work in art is acceptable as proof that the worker is an artist and a great artist, too. The comet came up from the dim nowhere and has steadily moved toward the zenith, but it proves to be no comet but a star, a star, by your leave of considerable magnitude.

Nicholas Haz makes pictures intentionally and with forethought, yet so artistically conceals his art that spontaneity is synthezied if not produced. There is nothing of the academic about our subject's work, yet he adheres to rules. There, we have used the horrid phrase. Rules Things made to govern the untrained, to furnish the mediocre and outer fringe with subjects for discourse, and for masters to subconsciously obey with an assimilated experience or disobey for better reasons. Haz does what he wants but with a reason, and what he wants is good enough for the severest critics.

You shall be told the salient features of the man and then the less important facts of birthplace, and so forth.

Haz is a modest man. He is proud of things that in relation to his abilities are piffling. He is proud, for instance of the right to tack A. R. S. P. to his name. He is proud of having originated a phrase, a

definition of Composition, he calls it. He is proud of differentiating between tweedle-dee and tweedle-dum, as witness his boast of showing the difference between the laws and the rules of Composition.

And in that pride there is a deeper modesty, for he measures these things as bigger than himself and should be very much astounded to be told he is a great man.

Personally, he is slow speaking, deliberate, quiet and unassuming. His is a warm and friendly presence. He invites your friendship and feels kindly toward the world. In appearance he is rather careless than fastidious as to clothing and almost entirely neglectful of money, profit, or mere tactics of living. His courtesy is instinctive not studied and his kindness has no object but just is. A most likable chap and one whom it pays any man to cultivate.

Start him on his favorite subjects and you have awakened a lion. You have opened the flood gates of a fiery stream dashing down Olympian slopes. He speaks authoritatively, not as one who would force you to accept, but with the convictions of having lived with and mastered his thoughts. And when Haz speaks of art, you listen. By all means do listen for you shall learn much, and agreeing or differing shall find your own mind so stimulated as to start it to some profitable thinking on its own accord.

In order that I might qualify to the writing of this I wrote my friend for some items that might be worked into an article: Things about himself, intimate and with human interest. What came back made me smile. It is so very naive, so absolutely and boyishly frank and modest. So flavored with the essence of genius in being unconsciously and wholly frank. A number of sentences, each complete, each disconnected from the preceding and the succeeding but all sweeping on to a mighty clever total of himself. Introspective, keenly observant of his effect on others and analytic of their effect upon himself. What follows is verbatim as it came to me. You will note he speaks of himself as of someone else, and I want to assure you that as he wrote he felt that way. I wish I could express in words his form of egotism,—an ego that lives outside itself in the art on which it depends for entity. A self that dwells so little on self that eating, and dress are necessary wastes of time and energy, yet a self so decided that it insists on beauty, virtue (not according to the book or the smug) and true Godliness. A simple man like either you, dear reader, or myself, with a mind attuned to the infinite, maybe also like you, dear reader, but beyond poor me.

Here follows the Haz reply to my questionnaire:

#### NICHOLAS HAZ ANSWERS THE QUESTIONNAIRE

Nicholas Haz was born in Zólyom, Czecho-Slovakia, (formerly Hungary) on January 18, 1883.

His father was a travelling salesman who never wished for an artist son.



CAMERA CRAFT



*"Whack!"*

*Nicholas Haz*

## C A M E R A C R A F T

As a small boy he smeared up every available surface with pictures done in all mediums (media) and tried to copy all family chromos and photographs without the benefit of tracing.

At fourteen and a half he entered the National School of Arts and Crafts in Budapest where he never amounted to much and was soon invited to quit for antagonizing a teacher.

He studied in sixteen different schools of art since then, but is still looking for a good teacher.

He thinks that a good teacher for a short time in the beginning is worth more than a dozen academies through life.

His bitterest memory of childhood is that he never was allowed to wear his knickerbockers short; they made him wear them to reach to the middle of his shinbones. They were afraid that he would outgrow them too soon.

He thinks that he is a sloppy dresser now, because he never could love his childhood clothes, which he wore out very rapidly anyhow.

He had intense fun in going against orders and never kept out of mud puddles, rivers or caves even in the face of painful punishment.

He thinks that he had only three good ideas in all his life:

1. When he left Hungary.
2. When he turned into a vegetarian.
3. When he took up photography for a living.

Of poor ideas, mistakes and failures he has had he could write many volumes of great length.

For seventeen years as a painter he did not know the real meaning of the word "Composition", although he was a student of the magnificent Franz von Stuck for five years.

He claims the distinction of having defined composition the first time clearly and thoroughly: "Bringing things together within a space for a purpose."

He thinks that this not only covers all artistic or mechanical composition but everything in the Universe, for everything is composed of something else.

His definition of picture-making composition is this: "Bringing together images within a two-dimensional space for the purpose of representing Nature or Ideas."

He thinks that this covers every imaginable picture ever made or to be made in all times.

He is the first man to definitely separate the laws of composition from rules of the same.

You must obey the laws if you want to get results, he says, while rules can be disregarded with impunity.

You must use contrasts if you want to make your work visible, is the first law; your picture must have a boundary, is the second, and that's all, he proclaims.

There are millions of rules; every time, nation, climate, race, city,



CAMERA CRAFT



*"Nix, Girls, Nix!"*

*Nicholas Haz*

## CAMERA CRAFT



*The Three Graces*

*Nicholas Haz*

studio and individual having different ones, all of which you may follow or disregard at will, he thinks.

He would prefer to be a hobo or live in a shack in the woods, yet lives in a \$5,000-a-year studio in the heart of New York.

When people ask him how he can pay that much rent, he truthfully answers that he does not know.

He came to America in 1913 and was vaudeville sketch artist, newspaper court sketcher, portrait painter, floor walker, art teacher, nephew to a millionaire uncle, assistant window trimmer, poster designer, house painter, scenery painter and photographer, having started in the last-named in 1920 in Nickolas Muray's Greenwich Village studio.

There are few big cities in the U. S. A. where he has not been, of which class San Francisco is his favorite. (*Fie fie Nick.*)

A good photographer is better than a mediocre painter and as good as a good one, he thinks.

He is unmarried, but it is not his fault; he has been turned down a few times.





*"Outrageous"*

*Nicholas Haz*

He needs a haircut most of the time and the manufacturers of brilliantine would be all bankrupt for his patronage. His trousers are well pressed when new.

He always tells what he thinks is true regardless of others around him. This makes him a rather lonesome photographer.

He likes pictures of all sorts, music, fog, Oriental cooking, comic strips, books, arguments and revolutions, if he is not in them.

He has made peace with poverty as well as with lonesomeness, having succeeded in finding redeeming features of both. He firmly believes in the theory of compensation.

He hates hypocrites, uplifters, cactus pears, too many sittings, sentimentality, sickness, lack of independence, and to be bored.

He likes this country very much, but is getting ready for an extended world travel, during which he hopes for many adventures, some of which may equal those he has enjoyed in New York City.

In short, he is very serious in contemplating himself and his career and laughs heartily every time he considers how serious one can be under such circumstances.

And he hopes the reader may be just a little serious, too, as he reads, and may not laugh too much for it is of our hopes and thoughts that our lives are made.

# Lecture Notes on Photography

By Professor Edwin A. Sperry

Pei Yang University, Tientsin, China

Illustrated by the Author

Photography is the art of transferring the image of any object onto a picture plane by making use of chemical reactions which are produced by the action of light on a sensitive medium.

It can be readily seen that Photography has many valuable uses in all branches of the arts and sciences inasmuch as it makes it possible to retain the actual and true appearance of anything capable of projecting an image.

On account of the fact that it makes these records without regard to any selective action they can be relied on for absolute accuracy. Valuable records are obtained by its use both in the representation of stable objects but also the analysis of motion when series of pictures are taken by very frequent intervals. Another fact has been taken advantage of and that is that the action of the sensitive surface is cumulative which makes it possible to photograph objects which are not visible to the unaided eye. This is of special importance in astronomical work and has made it possible to locate stars and other luminous bodies which had never before been discovered by the use of the telescope.

Even though it has a broad field of usefulness it must be admitted that it has limitations, such as the inability to reproduce the colors of any object or view but this has been in a measure, overcome by the invention of special processes which are remarkably true to nature as regards the reproduction of all shades and kinds of color. There is another characteristic which may, under some conditions, be considered as a limitation and that is the fact that a photograph follows strictly the laws of perspective. In many cases it might be an advantage to represent an object in what can be called an isometric manner but inasmuch as the camera shows the view or object in the exact form in which it appears to the eye it must, as a consequence, reproduce it thus.

In taking up the subject it has been divided into various heads and subheads with a view of preserving as far as possible, a certain degree of consecutiveness so that each division will lead up to that following from the initial projection of the image to the final reproduction of it on a properly prepared surface in permanent form. These headings are:

## 1—IMAGE PROJECTION

A—Pin holes

B—Lenses

Historical

Principles

Aberrations and Corrections



## CAMERA CRAFT

### 2—ILLUMINATION

A—Diaphragm

B—Shutters

### 3—CHEMICAL ACTION AND REACTIONS IN FIXING THE IMAGE

A—THE SENSITIVE PLATE

Types

Action of light on the sensitive plate

Developing and fixing

Manipulation

### 4—RECORDING THE IMAGE

A—SENSITIVE PRINTING PAPER

Printing-out paper

Printing-in paper

B—FIXING PRINTS

Toning of printing-out paper

Developing of Printing-in paper

## IMAGE PRODUCTION

### PIN HOLES

If all rays coming from an object were cut off except one point we would have a cone of light convergent at that point. If the rays which converge at that point were allowed to pass they would form a diverging cone of light exactly similar to the converging cone only in a reversed position. If one single ray of this cone should be projected onto any surface it would give a perfect reproduction of that point of light. This naturally suggests the pin-hole as the simplest system of projecting the image. While this is quite true there are many ways in which it fails to be practicable.

If the pin-hole could be infinitely small we would have, theoretically, a perfect image on the plate. It is a fact, well known in physics, that the maximum concentration of light at the center of an object is obtained when the axial and marginal rays coming through a hole differ in length by one-half a wave length of the light employed. Based on this theorem it has been determined that the most efficient sizes for a pin-hole ranges from 0.014" for a three inch distance from the hole to the plate, to 0.025" for a distance of ten inches. These are purely theoretical and there can be a considerable variation from it without any appreciable difference.

One fact which makes the use of the pin-hole impractical is that in comparing the time necessary for a proper exposure, with it with that necessary in the use of a well constructed lens, we would find that it is altogether too slow for any ordinary purpose. Taking a pin-hole at 6" distance it will, according to the rule, have an opening of 1/300 of the distance from the plate. A lens having an opening of 1/16 of the distance from the plate would have 50 times the diameter of the pin-hole. As the illumination is as to the square of the diameter, the pin-hole would re-

quire 2500 times the time required by the lens. Assuming that we would have to give the lens  $1/100$  of a second we would have to give the pin-hole 25 seconds which in almost every case would be quite out of the question as regards practical use.

As stated above, if we could have an actual point as the hole, disregarding diffraction, we would theoretically have a sharp image thrown onto the plate. Owing to the fact that we must have an appreciable size of opening for the hole, the rays of light coming from any one point would necessarily form a cone and would diverge even very slightly as it passed toward the plate. The point would thus not appear as a point but as a small circular spot of light. The size of this spot would depend on two factors, 1 the size of the pin-hole, and 2 the distance of the pin-hole from the plate. This is called the Circle of Confusion and appears in the image cast by the lens as well as in that cast by the pin-hole. The relative size of the circle to the size of the picture would remain the same in all distances so that it would have a constant value.

## LENSES

A lens as ordinarily considered, is an appliance composed of one or more pieces of glass shaped or formed in such a manner as to concentrate a pencil of light coming from any point and, passing through it, form a point of light at some fixed distance from it on the opposite side from that of the source of the light.

Simple lenses were first used for the purpose of correcting vision. The exact date of their discovery is very uncertain but from all evidence obtainable this was from 600 to 700 years ago. They were combined to form the telescope about 300 years ago.

About 335 years ago they were first applied for the purpose of projecting an image onto a surface on the discovery of the "Camera Obscuro" the name meaning "Dark Closet." The first lenses used for this purpose were of the plano-convex type with the plain side toward the object, which as will be seen later, is one of the simple methods used for a partial correction of what is called Spherical Aberration. These lenses were in common use until about 150 years ago when the method of correcting Chromatic Aberration was applied. Just what the method was at that time I am unable to say. A little over 100 years ago the accuracy of the lenses in the Camera Obscuro was much improved in the use of the positive convexo-concavo type or what is called the Meniscus or Perisopic.

This was the stage of development which we find at the time of the first application of lenses to Photography which was the result of the discovery about 85 years ago, by the French scientist, Daguerre, of a method of fixing the image projected on the surface of the Camera Obscuro by the use of chemicals. The Camera Obscuro was modified and reduced for convenience, to the size we have at present in the ordinary Camera but was still called "Camera Obscuro." For convenience the last word was dropped and we now have the simple name "Camera."



Owing to the inaccuracy of the simple achromatic lenses then in use they were of necessity, made so small that they gave but little illumination and were altogether too slow for practical purposes. As a result, every effort was made to devise a type of lens which would allow a larger aperture and greater illumination by using combinations of several simple lenses in two separate systems. This type was called "Rapid Rectilinear" as a general term, inasmuch as they gave good results with a much larger aperture and that the distortion was corrected. They were, of course, achromatic. These terms will be explained later.

Photographic lenses remained in this stage of development for nearly 40 years when a new glass was discovered which gave a high refractive power but had low dispersion which brought in new factors in the calculations for the corrections of the various aberrations. This glass was discovered by Professor Abbe of Germany in 1881 since which time the art of calculating and designing photographic lenses has rapidly advanced until at the present time we have lenses which are most perfectly corrected and capable of meeting the most exacting requirements.

The difference between the action of the pin-hole and that of the lens can be readily seen. In the pin-hole we take, theoretically, but one ray of light coming from a point which, on passing through, strikes the plate as one ray and at one point, no matter how great the distance may be from the hole to the plate with the modification, of course, relative to the "circle of confusion."

In the lens a divergent cone or pencil of light rays coming from the point will in passing through the lens, become proportionally refracted and will, theoretically, be concentrated as a point of light at the focal plane. From this it can be seen that the pin-hole has no fixed focus while the lens, dependent on its refractive power, has necessarily a fixed focus.

As has been stated, we have the circle of confusion appearing in the image formed by the lens just as in that formed by the pin-hole, but it is the result of very different causes. That of the pin-hole is simply mechanical while that of the lens is what might be called optical and is due to the laws of the refraction of light. While it is possible to calculate a theoretically perfect lens it is impossible to produce one in actual practice. This is due, not only to mechanical imperfections but also to the variable refractive action of various glasses from which lenses are made.

We are all familiar with the fundamental law of refraction or the bending of a ray of light as it passes from a body of one density into one of another density. It is on this law that the action of lenses depend. Glass is the medium commonly used for this purpose. When we speak of glass we merely convey the impression of a hard, dense substance, more or less transparent or translucent, from which many articles of common use are made. It is composed of the silicates or borates of various metals or alkaline earths or, in other words, of a compound of acidic and basic oxides which is of the same nature as that of a slag. The acidic

## CAMERA CRAFT

members of the compound are confined to the oxides of silicon, known as silica, and that of boron or boric oxide. The basic members consist of quite a number of metallic oxides while the alkaline members are confined to the oxides of sodium and potassium. The following list gives those which are commonly used in the manufacture of clear glass.

### ACIDIC

Boron Oxide	11
Silicon Oxide	28

### ALKALINE

Sodium Oxide	23
Potassium Oxide	39

### BASIC

Magnesium Oxide	24
Aluminum Oxide	27
Calcium Oxide	40
Zinc Oxide	65
Strontium Oxide	87
Barium Oxide	137
Lead Oxide	207

(To be continued in the February issue)

## SANDS

Jean L. Allen

*I'd like to feel that a part of me  
Lies hid 'neath the shimmering sands  
Where their golden warmth could keep me safe  
From the touch of unloving hands.*

*But most of all I'd like to feel  
That there by the shining sea  
A flaming moss flower burns and sways—  
The radiant Soul of me.*





# The All-American Salon

By Milton M. Inman

Los Angeles Camera Club

Illustrated by reproductions of some of the prints

Pictures have a universal appeal; an appeal to the very roots of civilization. Our culture of today can trace its foundation to a primitive pictorialism that is older than aesthetics. Pictures have a significance to children before their imagination is stirred by the romance of the story teller, a significance which is not lost with an increasing sophistication. If nothing else the All-American Salon at Los Angeles is faithful to pictorialism and confirms one's belief in its universal appeal. The salon is more of course because it goes beyond recognizing its elemental character, presenting a development of all that has gone before.

Art is vital when it stirs the soul of human nature: it is real when it is true to the simple truths of life: it is ideal when it inspires the appreciation of sheer beauty: it is popular when it strikes directly at the heart strings of the people.

Hung on the walls of the All-American Salon are examples of a popular art that represent the spirit of America more accurately than a barometer of economic or social conditions, or the intellectual product of scholars. Here is evidence of what Americans are thinking, doing, preaching and practicing; in fact what Americans really are. More



*The Toilers*

*R. L. Van Oosting*



*"Gerane"*

*Fred. R. Dapprich*

modestly than the dazzling headlines of the great dailies this collection presents a convincing cross section of America and Americans. Here is a skyscraper brushing the clouds, a monument to modern architecture; a playday at the seaside; a country scene that recalls the joy of boyhood in the wide fields; a glaring sidewalk, cold shadows and beams of steel that prepare one for the deafening resonance of an elevated train; uneasy crowds and patchwork sunbeams which show us a metropolitan railway station; a waning day on the desert which tells a tragedy of waste and desolation. All these are the settings in which we move. Then there are the people with whom we live, the actors who are more interesting than the settings; an old man with the treasure of a lifetime, a woman who knows too much, a girl with the promise of a glorious womanhood, a boy that anyone would recognize as a friend. These are the people who mould our lives and give reason for the existence of America.

The purpose of a portrait is to reveal personality and judged by this criterion alone Lumiere's "Photographer Histed" in a group of four masterly portraits is the outstanding print of the salon. This is also an example in which a perfect technique is hidden by the picture itself. Its charm will linger in one's mind long after the catalogues have turned yellow with age.



## CAMERA CRAFT

"Jack Garo" by Franklin Jordan demands one's attention for its virility and recalls the bad men who trod the boards of Wister's thrillers. Will Connell's "Portrait" is misnamed but it is a difficult thing well done. His "Two Brass Cats" is more than amusing. Sophie Lauffer offers an interesting character study in her "Mrs. McKibben". Mrs. Minna Keene has three beautiful carbons, of which "Anna" has the air of a Raphael madonna.

A characteristic of Louis Fleckenstein is the sustained high quality of his work. Few other workers' pictures bear the stamp of originality that Fleckenstein's pieces consistently do. One can always recognize a Fleckenstein picture. Choosing his best is like drawing from a pack of aces, but having drawn the choice rests upon "The Family Circle" for its spirit and understanding. As a collection his six prints draw the admiration of visitors as the best of the salon.

Wm. Gysen of Akron, Ohio, shows an intimate picture of a big city, a thing of solidity and endurance, cleverly composed and spaced. It is not cold and quiet like an architect's drawing and would send a man like Karl Capece off to a far country. "The Wonderful City" is as purely American as the three Arizona prints of Hanna's which hang next to it.

Fred Dapprich hangs three prints, one of which is a humorous bit of satire. "A Study in Futility: Just Nuts" is just a picture of three common walnuts on a piece of tinfoil such as comes on a box of film, but it is rich in humor and gay monkeybusiness. Photography lends itself well to comedy and it seems a shame that more workers have not taken advantage of the wealth of humor which awaits exploitation. Perhaps we should be players as well as workers. In his "Gerane" Dapprich caught the spirit of the girl and interprets it with understanding and truth. This lovely girl would win the heart of anyone.

"The Prelude" by Laura Gilpin, which has been exhibited consistently since 1917, received much admiration. Louis Bucher has a fine group of five prints, "From the Deck of a Wreck" is a splendid piece. Everyone has walked through a park at night and seen such a scene as Bucher has made a picture of which he calls "In a Park at Night". W. H. C. Carriere has a pleasing picture, "A Summer Day." Farciot Edouart of Hollywood hangs a beautiful bromoil transfer, "Louvre Mists," in which he has preserved the atmosphere with a delicacy uncommon to the process. One of the best landscapes is "April on the Prairie" by Dr. Saunders who exhibits only the one print.

Kaye Shimojima is still the leading Japanese pictorialist if one may judge by his work. Dominance is difficult to maintain, and especially so in pictorial photography, where competition is increasingly keen. "The End of the Climb" is a thing of beauty, and of the beauty of the mountains that lure one to the high places. He has been faithful to the mystery that shrouds the high peaks but he has not made a concession of reality. His mountains are real and are there for those who will climb them.

"Foams" is a bromoil transfer, more purely Japanese and is a delightful arrangement of lines, swirling mass and delicate tones, and is a marvel of technique.

Several other Japanese workers have splendid pieces. "Morning Light" by S. Izuo is a harmonious grouping of gas storage tanks lighted from one side to accentuate the effect of roundness. "Summer Cloud" by K. Ota is almost theatrical. Glass is very difficult to photograph, and much less promising pictorial material than pot and pans, but K. Asaishi has made a real picture of a group of glass dishes, which he calls "Ovals".

Clark Thomas has three fine transfers, which attracted considerable attention. "Camera Study", if one may excuse the title, is a beautiful thing that would warm the heart of any photographer, botanist or Californian. The study is simple mass, line and tone, but it is also more than a faithful photograph of magnolia blossom in all its glory, for it preaches a silent sermon of beauty. Commonplace roads lined with ugly telegraph poles becomes an intriguing pattern sinking into the distance, and alive with reflections on a rainy day. "Stormy Evening" by Weddell is a picture which takes advantage of the transformation.

R. L. Van Oosting does some unusual work with his favorite subject, the desert. "Red Rock Canyon" is a group of rocks, hills and sky, but it brings the desert to one with convincing reality. There is a wide difference between fact and truth.

Ralph Bonwit has three pictures, one of which is a striking piece of work which he named "Looking East". Here is the city, masses of stone with a sky that is heavy with smoke and dirt, places where men work. Toil seems to be written all over it. In contrast to the city is a picture of an aged Mongolian standing before a door, which E. C. Brauer calls "The Door of a Thousand Mysteries".

Mary Walsh is fortunate in having three distinctive prints out of three, just about a perfect record. Her "Winter Stream" is cold in color and makes one think of the richness of the winter without its bleakness, a beautiful arrangement of light and shade. To a child who has never seen snow, and there are many in California, will come a new realization after seeing the picture. Her "The Rustic Bridge" is of a similar tone and presents its own demand that it is to be classed among the year's best work. Her "Pasture" is a pastoral and a tribute to its maker.

Joseph Petrocelli has six bromoils which indicate a wonderful technique. Petrocelli must be a very interesting person, judging from his work, for they are interesting and close to life. "Sunday Afternoon" and "Pastorale" received the most praise.

"The Cabby" by A. T. Roberts carries one back to the days when gasoline was a byproduct of kerosene and it took a sunshiny day to make a print. Otis Williams shows a fine boy's head which he calls "Philippe de Lacy". Dr. Max Thorek's "Adoration" deserves attention among a group of four prints.



## CAMERA CRAFT



*"Let's Go!"*

*Milton Inman*

# Camera Work of Moving Pictures For the Amateur and Professional

By Ernest M. Reynolds

Illustrated by the Author



*Editor's Foreword—The author of this series states as prefatory to his text that it has been his wish to abstain as much as possible from the set forms and didactic manner of a text-book. How ably he has succeeded will immediately appear to the reader. Mr. Reynolds commands our highest respect for his skill in making technical, constructive and instructive matter as interesting as a story.*

## FROM WHENCE IT CAME

So thoroughly has the moving picture woven itself into our lives, that especially to the rising generation, little or no thought probably has ever been given to the origin. Strange as it may seem with an art so comparatively new, stories of widely varying nature are told and retold upon the original discovery of moving pictures. Undoubtedly it is better to say the invention or experiment which eventually led to the practical motion picture.

Of course ordinary photography such as the commercial or portrait type, commonly known now as still photography, was being used years before the moving picture was conceived. However, it was the gradual development of the photographic art which eventually led to the first experiments with moving pictures. Still photography in its early stages was handicapped by the inability to compound a surface that was sensitive enough to daylight to permit a very quick exposure. This may be exemplified by the necessity of using the "head rest", a clamping device used to hold the head of a person sitting for their picture. The exposure of the photographic plate necessitated so long a time that without this device, the slight involuntary movement of the head would cause the



resultant negative to show a blurred appearance. But with the head set in this device the plate registers little or no movement of the person.

True to fashion, as photography advanced one of the most noticeable developments was the more sensitive photographic surfaces. With this advancement of the art came the processing of a plate which was then known as a "quick" plate. Immediately a new field was opened which allowed no end of experimenting. The recording of objects in motion taking up a large portion of the interest. This then was where the very beginning of "moving pictures" took place.

Probably one of the most authentic bits of history along this subject is dated around the year 1878. The principal figure in this story is John D. Isaacs, a name seldom if ever mentioned in direct connection with the present-day moving picture. Nevertheless John Isaacs nearly a half century ago designed what today is the counterpart of a moving picture camera. The story goes on to say that Senator Stanford and James Keene wagered \$25,000 as to whether a trotting horse at one period of its stride, had all four feet off the ground.

A number of cameras were designed and set up in an attempt to decide the historic bet. To all appearances everything was a failure in these new devices, until Senator Stanford called in the inventor Mr. Isaacs. It was not until 1888 that an electro-magnetic release principle was designed and the horse photographed—with all four feet off the ground. Of course Senator Stanford won the bet.

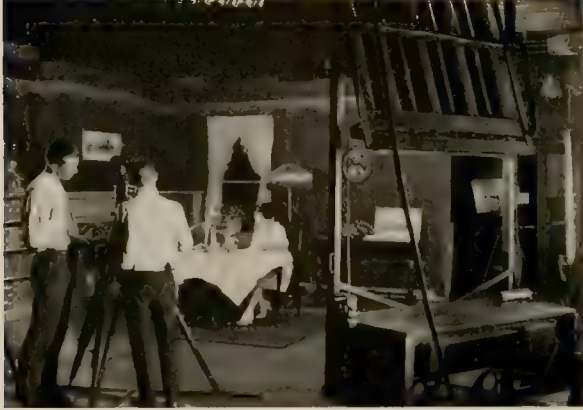
The first practical demonstration of moving pictures was given to a small private audience early in the year of 1895. It was not until 1900 at the World's Fair at Buffalo, New York, that the public viewed for the first time, the actual moving picture of commercial value. Almost instantly small picture shows, remodeled from store spaces of all kinds, sprung up like mushrooms. Pitiful exhibitions of flicker were these places; however, a seed had been sown and an industry was in the making.

Today we have a monstrous proposition involving hundreds of millions of dollars and ranking fifth in the industries of the United States. The best talent of the entire world is brought into focus upon the screen, and the most dependable engineering forces are at work developing machinery to produce and exhibit these pictures. We have only to reflect for one moment and view the picture theater of five or six years ago; contrast it with what we have today—hundreds of picture theaters in the country each costing over a million dollars to build. Many of the big financial institutions which go to make up Wall Street are heavily interested in the production and exhibition of moving pictures.

### METHODS OF FEATURE MAKING

We often hear the question of how and where are these productions made, which we see and comment on regarding the wonderful acting and beautiful scenery. It is quite difficult to estimate the number of bona fide

## CAMERA CRAFT



*An odd corner may become a complete "set."*

producing companies in the United States, as the business is going forth with such increasing proportions. The financing of these companies is usually done in or around New York City. By companies is meant the corporation itself. One company may have a dozen different companies or troupes working on different pictures at the same time, but all under one definite parent company.

The average feature picture of today contains about an equal number of interior and exterior scenes. The interiors are usually made in a specially-designed building called the studio, while the exteriors may be made anywhere that coincides with the scenes of the story. Interiors are as a rule more expensive than exteriors to make. There studios are located in many parts of the United States and foreign countries. The larger colonies are in New York, Los Angeles and Miami, Fla.

It has just been our good fortune to receive an invitation from a friend to visit the studio where he is working. As a special incentive, he mentions the possibility of meeting the new all-star cast which has just been put under contract for a series of feature pictures. This invitation of ours comes from an assistant director, working in probably the most pretentious moving picture studio in the country, located in New York City. Our first surprise is meted out to us when we catch sight of the building itself, much larger than any other in sight, of the very latest design and a credit to any city. We leave the every-day world outside, and enter into the realms of a modern motion picture studio. Again to our great surprise, we find a large office well filled with clerks and stenographers who do not look or act unlike the office force of any large manufacturing concern. Just so, it is a manufacturing concern in every detail, instead of making steam shovels or wearing apparel, they are making picture plays, providing one of the greatest necessities of today, entertainment. After being assigned to a guide, we step forth this time, truly into another world. The main studio consists of a very large room reminding us of a gymnasium, only several times larger than any gym we



*An elaborate "full stage" set.*

ever saw. We are told this room is four hundred feet long and half that wide. Dozens of scenes may be set up here at one time. The scenes or "sets" are very similar to ordinary stage scenery, only it is quite apparent that much more work has been put on these, the reason being that the camera is very critical, and quite often sees things which pass by us, unnoticed.

The lighting system is the most powerful imaginable. The modern studio has two types or qualities of lighting. One is the flood light which illuminates the entire scene with a soft, but very effective light, photographically. This light is produced by mercury tubes, commonly seen in the portrait studio. However, for motion picture work, it is necessary to have a great number of these lights. At least fifty tubes are required to properly illuminate the average room scene. The other type of lighting is based on the principle of the ordinary arc lamp, but of a highly-developed nature to adapt it to this form of illumination. These lamps produce a harsh white light which is used to give the highlights and shadows, which lend a somewhat more artistic touch or naturalism to the scene. Very fine effects are often produced with an arc lamp much like a large search light which concentrates its light on certain subjects. These concentrated shafts of light are often thrown from high above the "set" and back of the players, thus presenting to the camera an outline of white light upon the actors. This effect is known as backlighting.

Our little party of sightseers is now guided over to a very large scene in Venice. Nothing has been omitted. There is water in the streets, numerous smoothly-gliding gondolas, with their brightly-costumed gondoliers, and age-old buildings inhabited by people apparently just stepping from the pages of history. Upon closer examination we realize there are several overall-clad figures working about the scene. These are mostly electricians, stage-hands, property men, carpenters and artists.



The scene being nearly finished, their work is fast coming to completion.

After looking around a little we begin to realize the wonders of modern stage-craft. The buildings which so cleverly resembled stone and cement are nothing but wood, cardboard, canvas and paint. Usually the carpenters build up a one-sided structure which looks like the wall of a building, then this is painted by artists skilled in the art of painting to deceive the eye of the camera. Screens of canvas are placed in back of the entire scene, also painted to resemble a continuation of this scene far into the distance. Days and weeks are spent in the preparation of elaborate scenes which mean an expenditure of many thousands of dollars, but at that much cheaper than carrying the whole company into a foreign land. The waterway which adds so much to this Venetian scene is a series of tanks, which are a part of the regular studio equipment. Water scenes are one of the most difficult pieces of work to make and the average studio prefers by all means to make such work whenever possible, under its own roof or at least on its own grounds.

(To be continued in the February issue)

8 8 8

## A Grainless Developer

By Sigismund Blumann

After reading copy and proof on several articles devoted to Grainless Development, Enlarging From Motion Picture Films, and similar subjects I began to feel an active interest in the matter. A letter to the ever-obliging and complacent Eastman Laboratory brought me some information, but no great hope. Our own writers seemed to be satisfied to approximate clean, clear negatives with the more or less usual developers and to diffuse according to the enlargement size for grain elimination, but all of this was not what was wanted.

Hours in my laboratory in what was at best aimless and desultory experimentation, led to nothing. One day I recalled the old days when Mop or Brush Development had a vogue. I remembered that the image came up in very warm tones of red-browns and the impression was of colloidal silver. The addition of Glycerine was part of the process. So I compounded a developer of the M. Q. ingredients and added Glycerine. The results were nil.

Having the sweet and thick stuff off the shelf I determined to make myself a batch of developer paste and proceeded forthwith to compound and bottle it in some empty lead, tin, or whatever it be tubes,—such as are used for tooth paste. This was put away and after about a month I tried some and found by chance what had been sought so unsuccessfully.

The negatives were made with a Memo Camera. The films were the Ansco Memo Film, the Eastman 16mm, and the Goerz Motion Picture Film. The results enabled me to enlarge from single frames to 11

by 14 without diffusion other than the enlarging produced and so little visible grain that the pictures are mistaken for contacts.

There is no secret about it, not even anything new. You can do it as well as the adepts who go about so mysteriously hiding their secret formulæ and methods. You do not even need a special formula. In fact the best thing to do is use the formula that comes with the material you choose to use. But cut down the Carbonate and Hydroquinon and the Bromide as directed and increase the Metol. Proceed just as directed. Do not use your judgment except to please yourself and if you fail blame yourself. Follow directions implicitly and be so good as to let me know what you get.

Weigh out on separate paraffine papers the proper amounts of chemicals which constitute the developer for the material you intend to develop. For Ansco use the Ansco Film Developer formula; for Goerz use the Goerz formula. Now put the dry Sulphite and the dry Metol and Hydroquinon in a mortar and mash them together to a very fine powder. Decrease the Carbonate by 15 per cent and add that to the mortar. Mash and mix again. Add the bromide and again mash and mix. Now whether the formula gives Metabisulfite or not, do you add about a grain to the ounce (this means to the ounce as given in the recipe when made up with water) and when all is mashed by the pestle to a smooth, almost impalpable powder, add C. P. Glycerine, drop by drop, mixing and mashing with the pestle, till you have a paste of the consistency of toothpaste.

You will, of course, have provided yourself with a number of new, empty lead (or whatever the metal be) tubes. Put the developer paste in a small confectioner's or pastry-maker's bag and through this squeeze into a tube till it is filled to within an inch of the open end. Close the end, double over and double again, then clamp with the binding strip provided.

Do not use for at least thirty days and then measure the amount of water you desire to use, and squeeze an inch or an inch and a little over, for every ounce of water, into the tray. When dissolved, proceed.

The Gevaert firm markets a tube-paste developer, and if Glycerine be the vehicle, or in fact any other saccharine fluid, the results will probably be the same. It is the syrup that does the job, but,—and I want you to note this well,—it does not do it when freshly mixed. Some sort of catalytic action takes place which I have not the equipment or the knowledge to try to discover, and time is the essence thereof. Maybe temperature will do instead of time. I don't know, and neither do you. Take the thing as it is and be content with the results.

Microscopic investigation shows that the particles of silver have remained evenly distributed in a fine state of subdivision, and there was little of the running to a nucleus in a sort of crystallization. Perhaps the little particles are depolarized by the saccharine and their tendency to coalesce is removed. An amusing fancy, perhaps, but it passes the time.

# Photography in Science. II. Exploring the Macrocosmos

By Professor Ingo W. D. Hackh

College of Physicians and Surgeons of San Francisco

Illustration through courtesy of Lick Observatory

When Columbus discovered America the news of a new continent created a great sensation in the Old World. It came at a time of intellectual awakening and naturally led to the question: "Why is not possible to discover still other continents." So adventurer and explorer set out and rested not, until all frontiers of the earth surface had been bridged and the earth surface had been navigated and mankind could say that besides the five continents, no other large mass of land existed, and the geographer could chart the world. True, there were still here and there unexplored areas in the dark continent or the arctic regions, but the general question was settled and the limits of the earth surface were established.

Photography has been the principal means of charting the heavens. When the photographic plate was for the first time attached to the telescope, the results were perhaps less sensational in the public eye, but nevertheless of utmost significance. By long and longer exposures still more and still fainter stars could be detected, and naturally the question arose, "Is there a limit to the universe, and will not by means of still larger telescope and still longer exposures still more stars at still greater distances be discovered?"

## THE SIZE OF THE UNIVERSE

Just as Columbus gave the impetus to geography which led to the recognition of the limited extent of the earth surface, so the photographic plate has aided astronomy to limit the universe by a definite boundary, for at the present day the result of photographic investigation is this: "The numbers of stars is limited, and their distribution in space is limited, hence our universe is limited and NOT infinite."

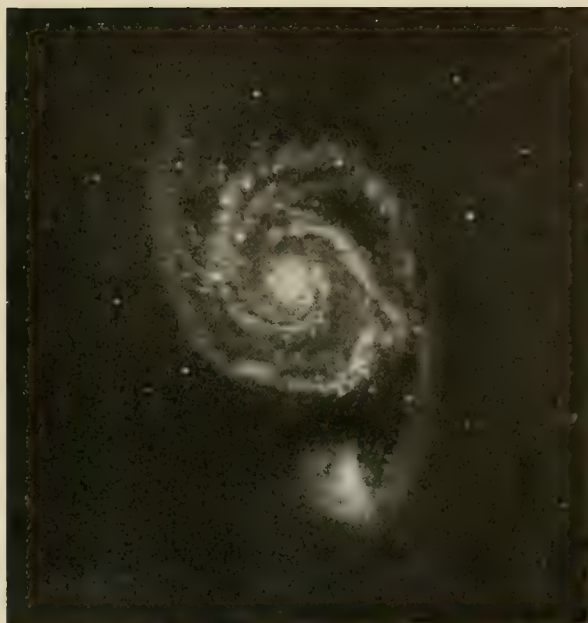


HALLEY'S COMET, MAY 6TH, 1910

*During a long exposure the telescope is kept pointed toward the subject. In this case the earth's rotation and its effect on the visual position of the stars in relation to the comet (the fixed point) causes them to appear as lines, the length of which is determined by the duration of the exposure.*



## CAMERA CRAFT



CANUM VENATICORUM—THE SPIRAL NEBULA M 51

*A photographic plate attached to the telescope becomes the camera for celestial objects. With exposures for hours at a time it is possible to record otherwise invisible bodies. Canum Venaticorum, nearly a million light-years distant, is shown to consist of individual stars and is an island universe or system similar to our Milky Way. An observer from this nebula would find our Milky*

*Way similar in appearance. Besides the spiral star clusters made up of suns there are nebulosities consisting of diffused gases.*

What does this mean? How is this conclusion substantiated by the photographic method of exploring the universe? First, let us assume for the moment that there is an unlimited, infinite number of stars, distributed in an infinite space. What should we expect in such a case from photographic exploration? Simply this: the larger the telescope, that is the larger the diameter of the objective lens which is a "light-gatherer," and the longer the exposure, the greater should be the number of stars recorded at the photographic plate. Statistical study of the photographs taken at the different observatories prove that this is not the case, for the actual result of such a statistic is that the stars are "thinning out" and fall far below the expected theoretical number, and thereby indicate conclusively that there are regions where no stars exist,—the end of the universe. Thus what Einstein calculates from theoretical considerations, is revealed by the photographic plate: the universe is finite and not endless. The Geographer has charted the known earth-surface, the astronomer has arrived at a similar epoch of recognizing the limits of his field.

What then is the structure of this universe? A glance at the sky at night reveals to the eye that the stars are not evenly placed, but in

apparent disorder sprinkled over the heavens. There is the Milky Way, and even a small fieldglass will dissolve it into a multitude of stars; there are the star clusters, and the still fainter nebulas. With telescope and photographic plate many thousands of hazy stars have been resolved into giant spiral nebulas composed of myriads of individual stars. A study of the position of these spiral nebulas, of the bright stars, which are relatively near us, and the faint stars, which are relatively distant, reveals to us that our sun, a relatively minor star, is a member of a spiral nebula or galaxy or milky way system.

The shape of our milky way system or our spiral nebula is somewhat like an oval watch and our position in it is somewhat off-center. If a photographer on a planet revolving around a star in the spiral nebula of Andromeda would take our picture, that is a picture of our Milky Way,—he would find it to look like any other of the spiral nebulas, we may assume that it will resemble even the picture of the Andromeda nebula itself. Furthermore, if he would take this picture today, he would photograph the light which has been emitted from our sun and our stars 900,000 years ago,—for it takes the light that long to travel the distance between these two spiral nebulas,—and light travels 186,500 miles per second! (nearly 6 trillion miles a year).

### THE MOTION OF STARS

Within this universe everything is in motion and the photographic plate is the only possible record by which this motion can be determined and measured. Hence every observatory has accumulated a vault of photographic plates which increases in scientific value as time goes by, for by comparing and superimposing the negatives of the same heavenly region it becomes possible to measure with the microscope the minute changes which occur in the relative position of stars. The longer the period elapsed between successive negatives the more pronounced and trustworthy are the results. Thus a period of fifteen years will show definite displacement of certain stars and enable the astronomer to arrive at the general tendency of "star streams" in our Milky Way and to detect a similar motion in the other spiral nebulae. Besides this direct measurement of motion there is another interesting and valuable method which reveals the advancing or refracting motion in the line of sight and which will be discussed in connection with the spectograph.

### THE BRIGHTNESS OF STARS

The light coming from a star is chromatic, that is it may be bluish, yellowish or reddish. It is found that the reddish stars appear visually brighter and photographically fainter,—for bluish stars the reverse holds. This difference between visual brightness and photographic brightness gives an important ratio in determining the temperature of a star. Photographic brightness is determined by the density of the image after a certain exposure,—visual brightness by comparison with standard stars

## CAMERA CRAFT

or by the "fading" out of the star when a slide of gradual opacity is moved across the focus between objective and eye-piece of the telescope. These two brightnesses give the "color index" of a star from which certain numerical relations of luminosity, size and spectral type are drawn.

## ASTEROIDS AND COMETS

Even in our solar system, where visual observation with a telescope shows many details, photography is essential. The smaller planets or asteroids are generally discovered by use of the photographic plate. These small bodies move around the sun and are much closer to the earth than the nearest star. If the telescope is pointed so as to keep a star in a fixed position on the photographic plate,—it follows that the asteroids will appear as short lines and the stars as points. Comets are also detected in this way long before they become visible in the telescope.

## NEBULAE

The majority of the nebulae are so faint that they can be studied *only by photography*. Photographic action is cumulative, thus the remotest nebulae will record itself by sufficiently long exposures. Less than half a dozen are visible to the unaided eye, many more can be seen through the telescope, but two million spiral nebulae or universes have been photographed! It is within this field, that photography is supreme and it has been estimated that with present instruments and plates we may reach 140,000,000 Light Years into space. A sphere of this stupendous radius is then at the present time accessible for investigation.

With faster photographic plates, with longer exposures, and with larger telescopes the astronomer will be able to push these limits still further back. But sufficient knowledge has accumulated for the construction of a model of the cosmos:

The Milky Way is the universe or spiral nebula in which we are located and our solar system with its planets is but an insignificantly small part. The speed of light is the measuring unit of the astronomer—it travels 186,285 miles per second and it takes 8.5 minutes to reach the earth from the sun. Light from the nearest star reaches the earth in 4.3 years and there are about two billion stars in the Milky Way system.

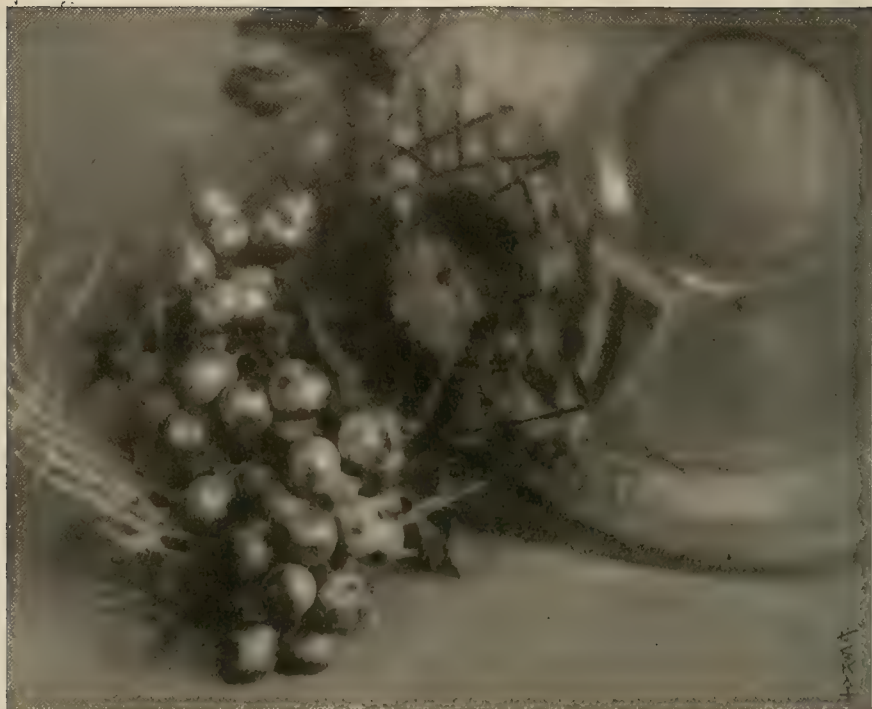
The nearest Island Universe is the Magellanic Clouds, which seem to be a detached part of the Milky Way, for they are 100,000 light-years distant. (A light-year is about six million million miles.)

The "whirl-pool" nebula, whose picture is shown, and the Andromeda nebula, which can be seen with any field glass near the zenith during November evenings at 8 o'clock, both are about one million light-years distant.

(To be continued in the February issue)



CAMERA CRAFT



FIRST AWARD

*H. S. Kaito*

Advanced Competition  
Series of 1928

# CAMERA CRAFT



Second



Third



Fourth

## JANUARY ADVANCED

Fourth



SECOND: *Torfinn Michaelson*  
FOURTH: *A. Kira*

THIRD: *T. K. Tsukane*  
FIFTH: *Dr. Max Thorek*

## JANUARY 1928 COMPETITION

### Advanced Pictorial

O. Aamold  
Mrs. C. Brandt  
Karl Burgersdorfer  
Don C. Coleman  
Heinrich Cranz  
Sylvestre Dubois  
Dr. C. F. Dundon  
Miss S. Elwood  
H. F. Etienne

L. J. Everson  
El Kerid Ghand  
Miss Helen Hammond  
J. Harold Hudson  
O. Ikuta  
I. S. Jacobs  
C. Z. Jiricki  
H. S. Kaito  
H. Kira

Dr. K. Koike  
Ferd. Kretschmer  
Torfinn Michaelson  
A. J. Pandian  
Maurice Smith  
Dr. Max Thorek  
A. M. Tomlinson  
Horace Tyzack  
T. K. Tsukane  
Egon Wagner

# CAMERA CRAFT



FIRST AWARD

*F. L. Owen*

Amateur Competition  
Series of 1928

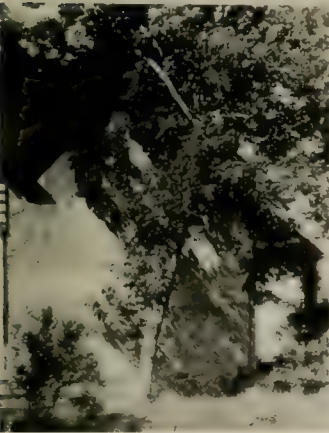


# CAMERA CRAFT



Third

JANUARY.



Fifth

AMATEUR.



Second

Fourth



SECOND: C. E. Lamphere  
FOURTH: Lock Shing Hong

THIRD: Mrs. W. F. Eldridge  
FIFTH: Louis R. Murray

## JANUARY 1928 COMPETITION

### Amateur Pictorial

Miss Nettie Allen  
Arf Arenson  
A. Bailey  
Edgar Barkley  
E. H. Beals  
G. B. Blaisdell  
E. J. Brown  
S. Bruzas  
H. A. Chapin  
Dr. B. J. Correy  
J. L. Deming  
Mrs. Ellen Doty

Mrs. W. F. Eldridge  
Miss J. Feris  
Hans Franz  
Mrs. G. O. Gleason  
G. Malcolm Greasley  
W. F. Guntermann  
H. M. Hammett  
L. Shing Hong  
Helen Inman  
Miss Iwani  
Harold Jennings  
Ab Afid Jhashi

T. Kojima  
Sing Kong  
C. E. Lamphere  
Carol G. Land  
Dan Lyons  
A. S. MacFarlane  
Edgar L. Mahen  
J. D. McCauley  
L. N. Meyer  
L. R. Murray  
Norman W. Newell  
Paul M. Newell

M. A. Obremski  
F. L. Owen  
Miss Emma Peterson  
R. E. Price  
K. Shimidzu  
O. S. Simonson  
C. L. Smith  
Dr. F. F. Sornberger  
Frank Trask  
W. C. Vestal  
T. M. Waumsley  
P. O. Weston  
R. Woolverton

## CAMERA CRAFT



### THE SILVER CUP PICTURE FOR 1927

Mr. S. Moriyama is a member of the Japanese Camera Club of San Francisco and one of a number of artists connected with that organization. Professional portraitists say his print is one of the outstanding portraits of the year.



## Hello! Here's Another Year

Stock talk takes the form of cheerfulness and assumed jollity for no better reason than that it is January and that January is supposed to begin a new division of time. Alack-a-day! Time is not measured by days, or weeks, or months, or years, except in business which deals with such things and with dollars, cents, pounds, shillings, francs, sous, marks, groschen and what not. Infinity is a day in the Life of the Supreme Being and for us it is divided into incidents, episodes, epochs, and eras. The world began for you the day you were born and shall end when you die. No, not your life. I said the world, meaning earth. For I assume and hope we go to a better place hereafter.

Nor should you deduce that this world is not a wonderfully fine and good sphere. It is as beautiful as our perceptions, as good as our virtues, as Godly as our living and thinking. Through blue glasses it all is blue, and through evil eyes it all is bad. We are blessed with the power of choice, and option is part test and part means for salvation.

Here is a ballad in the old style. Try it over on your vocal piano to any tune that suits you best and tell me what you think of it in the columns of our esteemed contemporary. Or if happily you like it well, send in your laudits and we shall print them,—perhaps.

## DOGGERELLE

*A Pessimist's a sorry soul—  
Sing Tol-de-roodle-doo—  
He has no aim in life, no goal,  
Sing Tol-de-roodle-doo—  
His mission is to strafe and purge  
His fellow man of faults and sins.  
He never chances, never wins.  
His views are bitter, dark, and dim.  
I do not envy him.*

*The Optimist is laughed at by—  
Sing Tol-de-roodle-doo—  
The world, but he will always try—  
Sing Tol-de-roodle-doo—  
To laugh with it and find a way  
For getting pleasure every day,  
Though sun or clouds be overhead.  
He is a cheerer, born and bred.  
And if, perchance the choice be free,  
Like him I'd like to be.*

### L'Envoy.

*Then to the moral give ye voice.  
Sing merrily or groan at will.  
The world goes turning onward still,  
And you, you pays your money  
For wormwood bitter or for honey,  
And you takes your choice.*



## CAMERA CRAFT

If this strikes a responsive chord and you have had your smile, get the old camera down from the shelf, put on the fur overcoat and the rubber boots, if you live east of the rockies, slush through the snow and make the welkin ring again, if you can find a welkin. Take pictures as if you knew pictures too can sing. And I out here in California will take my camera and put on my linen duster,—for we find January somewhat chilly and need something over our Palm Beach Winter Suits,—and go forth to make some welkins ring, also. Then let us hie homeward and make masterpieces for the year passes full swiftly and the Pittsburgh Salon, The Royal, The London, Los Angeles and all the rest will soon be sending entry blanks.

And even to you and me, common dubs who just take pictures for sheer love of the sport, nor hope for mentions or awards, should come the urge to add to our collection of precious records, the particular charm of a particular spot on a particular winter day. We'll be the optimist and smile with the world, Sing Tol-de-roodle-doo.

### What Can You Do With Him?

When a man is a natural born P. P. P. P. P. what can you do with him? God bless the dispenser of titles—he will make a prominent man of me before he is done. What does P. P. P. P. P. mean? Why Potent Prodder of Puerile Plodding Pikers, or anything you want. Here's some more verse.

ø ø ø

## THE PICTURE

Sigismund Blumman

*In the glory of first womanhood she stands  
Under the June time sun in the old rose garden  
And the honeysuckle vies with the perfume of her hair.  
The roses bend to kiss her gown, the morning glories smile  
Into her flowerlike face; the friendly hollyhocks nod idly  
The grasses ripple in the perfumed air of Spring.*

*In the leafy arbor birds are singing. It is mating time.  
The lazy noonday tempts the bees abroad: Their hum  
Is fitting to the season and befits the hour's mood.*

*Here is the spot she played when, as a child,  
It seemed the garden was a vast domain.  
Yon hummock was a very mountain and the trees,  
Lilacs and syringas were of monstrous growth.*

*A bird is singing in her heart and violets bloom  
In her, now pensive, eyes. Her lips rose petals,  
Are pursed in revery. 'Tis June! 'Tis Spring! 'Tis Spring!*

\* \* \* \* \*

*The blustering winds awaken me. Boreas roars.  
A chill envelopes me and she is gone.  
Gone is the vision. Vanished is the day.  
The garden withered and the roses dead.*

*Dear little girl that once I knèw,  
Dear little lad that once was "Me."  
Alone, an old, forgotten man I stand  
And dim-eyed look upon the picture in my hand.*



### About Filters

In the December issue we published an excerpt from a publication devoted to Motion Pictures, which was headed "Avoid Filters," and which in the body of the text, somewhat paradoxically, recommended gelatine filters.

As a matter of fact, filters are used by the professionals, and the best operators in Hollywood find them indispensable. Moreover, we have never found it necessary to use filters to lengthen exposures, since diaphragms were made for that purpose, and over-sharpness may be corrected with the proper soft-focus lenses or diffusion discs.

The following enlightening (and terribly breathless) paragraph from our friend, Carl Oswald, coming from a man whose knowledge of the subject is beyond question, will cover the subject:

"The use of filters as a means of exposure control and only for that, is all wrong. It should be unnecessary to tell why. What flash of genius inspired the writer to the discovery that a normal head at 15 feet (lens used not indicated) will record an image of  $1/200$  inch? As a matter of fact, an eighth-inch head at 15 feet will, with a two-inch lens, record an image slightly less than  $1/12$  inch, and if a one-inch lens be used the image will be approximately half that. Now, these figures are approximate and are given off-hand, so it will not be just or in good faith for some fellow who thinks with an adding machine, to tell me that the latter figure should be the reciprocal of 23456789 (decimal point second place or something like that). It really should have occurred to that author that  $1/200$  inch is much closer to the circle of confusion claimed for many of the better short-focus lenses and darned few of the longer-focus ones, than it is to any image likely to be projectable by even the best optics. As a matter of fact, such an image (assuming it possible)

would fall between a couple of silver grains and probably break its neck, if it did not by chance light on peak of one of the grains and thereby become totally eclipsed. As to the question of image displacement where filters are concerned, he is just sufficiently right to do serious injustice to filters and to those serious workers who find in ortho and panchro results a real value. Filters are made for a special purpose and have, are and will be indispensable in filling that need. And one word more to the same purpose. The more color sensitive the emulsions the greater the benefits to be derived from filters."

Returning to our own person, we will confess that with our meager knowledge of the scientific findings we wonder whether the laws of refraction and a resultant diffusion does not make the gelatine filter no better, if as good as those made of optical glass. There may be individual preferences and certainly some of the best filters have been made of gelatine between glass, but in that case we have really glass filters with the dye in a gelatine vehicle.

It is the purpose of Camera Craft to publish photographic news and opinions from any acceptable source, and the reader will readily see that from the divergence of such opinions he can draw golden inferences and profit mightily. This is a magazine, live and current—not a book. Like friend Oswald, we do not think with our memory or an adding machine.

---

### An Editorial Note

We welcome debate on matters appearing on our pages and where such argument is not controversial or malicious shall be glad to print all sides. After all, it is a many-sided world and we broaden by other men's points of view. From such heterogeneity we construct the homogeneous concrete conception.



## Association News

ALVA C. TOWNSEND, Lincoln, Nebraska, *President*  
CHAS. AYLETT, Toronto, Canada, *1st Vice-president*  
D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*  
JOHN R. SNOW, Mankato, Minnesota, *Treasurer*  
J. W. SCOTT, Baltimore, Maryland, *Chairman Commercial Section*  
PAUL TRUE, New York City, *Chairman Manufacturers Bureau*  
L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*

### News Release

The meeting of the board in Louisville, coming so soon after the great New York convention, was perhaps the most unusual one in my experience in many years with national affairs. All meetings have been important factors in the building of a greater National Association. The Louisville meeting was fraught with a considerable anxiety on the part of the executive board.

The unusual procedure of the New York convention in holding the entire board intact for another year, and the spectacular raising of nearly two million dollars for National Advertising, made the board conspicuously responsible for its success. Also, the spontaneous demand for a change from a mid-summer convention to an early spring meeting has placed a peculiar responsibility upon the executive board.

We had hardly had time to catch our breath after the July convention when we realized if the demand for a spring convention was to be met, there was no time for the folding of hands and relaxation. It was a time for action and if a spring convention, where on earth could be better go than to the city that most desired such a meeting? We found first of all, a group of local photographers ready and anxious to pledge their time and effort. The O.M.I. offering hearty support, with the secretary's assurance of 100 per cent cooperation. Thirteen large cities within a night's ride, in which we were surprised to find listed such cities as Chicago, Milwaukee, Detroit, Cleveland, Atlanta, Indianapolis, St. Louis, Kansas City, and others, to draw upon for attendance at a time of the year when we have every reason to believe they will attend. Within this area we have over 2000 contributing members to the

national advertising fund. The hospitality of the South overwhelmed us and demonstrated the truth of its actuality.

There is no other thought in the mind of the board and secretary but that every other previous convention will be anything less than a side show in comparison with the one that will be staged next March. Already plans are in embryo, which will draw to Louisville photographers who never have attended a national convention before. It must be a "business building" convention. Was there ever so appropriate a time when the photographers of the land should be taught how to capitalize on this, our supreme effort as undertaken in national Advertising?

I have said enough to make every thoughtful business man resolve now that the third week in March next, all roads will lead directly to Louisville, Ky.

The board meeting was a most inspirational session. There were several presidents of affiliated associations present, who felt that the interests of their Association demanded their attendance and the board greatly appreciated their presence. They discussed freely the effect the spring convention might have upon the associations usually holding conventions at this time of the year. It was their general opinion that the National Association should be the first to hold a convention and assured the board that satisfactory datings could be arranged for their 1928 meeting. Mr. Heineman spoke of the loyalty of the Chicago Association to the National and what an impetus the 1926 convention had given their Association. He heartily commended the board on its effort to organize the photographers of cities into local clubs.

Alva C. Townsend.





## Master Photo Finishers of America

A. E. Block, President.....27 Von Hillern St., Dorchester, Mass.  
 Fred. Mayer, Vice-President.....Portland, Ore.  
 Wm. J. Meuer, Treasurer.....212 State St., Madison, Wis.  
 Guy A. Bingham, Executive Manager.....Box 1020, Rockford, Ill.

### Territorial Vice-Presidents

South-Western States: W. F. Honnen.....1240 S. Main St., Los Angeles, Calif.  
 North-Western States: C. M. Coffey.....284 N. Commercial, Salem, Ore.  
 Mid-Western States: Chas. W. Lynn.....3917 Orleans Ave., Sioux City, Iowa  
 North-Central States: John H. Seamans.....7052 Jeffery Ave., Chicago, Ill.

Central States: E. L. Hurlburt.....315 St. Louis St., Springfield, Mo.  
 South-Central States: J. A. Hammond.....Box 650, Meridian, Miss.  
 South-Eastern States: Elon C. Robison.....105 Third St., N., St. Petersburg, Fla.  
 Great Lakes States: C. P. Phillips.....6930 Gratiot Ave., Detroit, Mich.  
 Dominion of Canada: W. A. Taylor.....274 Carlton St., Winnipeg, Man., Can.  
 Central Coast States: Wm. H. Eichner.....1210 "G" St., N.W., Washington, D.C.  
 New Jersey—New York City: J. G. Taylor.....24 E. 23rd St., New York City  
 New England States: H. K. Atkins.....Middleboro, Mass.  
 Mid-Eastern States: M. J. Koch.....535 Penn Ave., Pittsburgh, Penn.

### Was the Convention a Success?

Those who attended are unanimous in the conviction that the M. P. F. of A. is not only growing stronger apace but that it is growing beyond all the most sanguine hopes. It is also growing more useful and efficient, which is more to the point. It is functioning in every particular.

The actual registrations showed an increase of 17 per cent and figuring what that means in increased influence at remote centers the real gain is many times that. Conditions are improving for the members as individuals. The public is being better served and with better service comes more business. This is stressed in the 1928 Keynote which is "Quality Pays." On that platform the public will demand the M. P. F. of A. stamp on its prints and envelopes. Sell the public to a conviction that your membership means better negatives and prints and not just higher prices and you will have made membership indispensable, imperative.

Conventions are the affairs that cement the personal ties with contact, enlarge the vision and stimulate the ambition by example and word of mouth, and improve the ability by instruction. Mass psychology makes the demonstrator a thousand times more effective at a convention than in your studio. Hundreds are listening and hundreds are learning, ergo, you are caught in the eddy of thought and carried along. Long live conventions.

Advance notice is out that Al. Block is now President and Fred Mayer the Vice-President. Full reports will come through in due time and if you read your Develop-

ments faithfully you will learn much of what transpired, some of which may have escaped you in the hurry of the convention proper.

### Northern California Division

After passing through much stress and having survived a few crises, this division finds itself greater and stronger than at any time since its organization. A. F. Wager, of Santa Rosa, is proving an aggressive executive and a go-getter. He is the original fighting son of a photo-finisher who keeps nothing under his hat but his brains and insists on any and everything being threshed out on the floor. In consequence things are doing because they are being done. O. C. Hanson is Secretary and is officiating with stintless energy. The last letter addressed to its members states truthfully that Webb of San Jose is making the grand tour on the extra profits accruing from his membership. My! My! It seems only yesterday since we made the flying trip to that city to organize the finishers who were all shot to pieces.

### Warning to Finishers

The use of the Association Seal is intended for and should be considered as a sign of your pride in craftsmanship. To put it on the container of poor work is an injustice to yourself and the splendid body of men who are nationally banded to better conditions through deserving better conditions. If one of those unavoidable accidents occurs in your plant, confess to the customer, plead guilty, and take the consequences. Make good as best you may, but leave the Association stamp off of that envelope.



## Pacific International Photographers' Association

Embracing Alaska, Alberta, Arizona, British Columbia, California, Hawaiian Is., Idaho, Montana, Nevada, Oregon, Utah, Washington.

WILLIAM M. BALL, President; Corvallis, Oregon

## PHOTOGRAPHS *Live Forever*



S. Walters

Our First Vice-President is the right man in the right place and his perspicacity in having chosen our worthy President when chairman of the nominating committee has put him that much more in sympathy with the administration and what it proposes for the general welfare.

Mr. Walters is in every way fitted to assist the president in carrying out the plans and ambitions which it is hoped will make 1928 a banner year in the history of the Association. He is a photographer of the highest ideals and a self-made man. The qualities that connote these constitute him representative of the mass of the membership.

He is not nearly as serious as he looks

but, on the contrary, carries a wealth of humor with him and is pleasant company wherever present. His rise in prominence as an association factor has been phenomenal in rapidity but not surprising when his indefatigable efforts are considered.

In a word, ladies and gentlemen, here is your Vice-President. Shake hands with a real photographer and good fellow.

### THE TRAVELING EXHIBIT

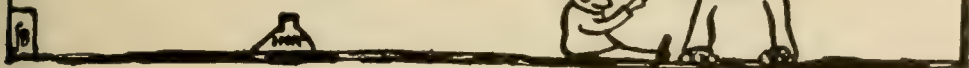
While at the Los Angeles convention the newly elected president received many inquiries from the Pacific International Photographers' Association members as to the use of the traveling exhibit, so in answer it has been decided to feature local exhibits in the various cities, not alone of the traveling exhibit, but the work also of local clubs or photographers who care to take this means to advertise photography in their locality.

A general chairman of this work has been appointed whose duty it will be to correspond with any person or club interested in such work to arrange dates and give any information and suggestions possible. Miss Kathryn Gunnell of the Blye Theater Studio, Salem, Oregon, has been assigned this duty. Her successful efforts in having conducted such exhibits in Salem gives her possession of practical information which, together with the well laid plans of the Pacific International Photographers' Board, should be a great aid in carrying on this very good work.

## PHOTOGRAPHS *Tell the Story*

# CHIT CHAT

About our friends.



Ye Editor Retaileth Newes of Ye Profession and in Quaint Italics Titillateth Ye Sphynx with Hys Quill

## North Missouri Photographers

The North Missouri Photographers Club held their thirteenth meeting October 6th and 7th, at the Alexander Studio, Kirksville, Mo. Those attending were: Z. T. Briggs and Henry Moore, Kansas City; Chas. A. Miller, Moberly; F. P. Rehmeier, Boonville; Frank Gress and Harley McClure, Brookfield; Mr. Jamison, La Plata; Mr. and Mrs. E. E. Waters, Edina; Mr. Wallace, Salisbury; Mr. and Mrs. I. S. Solem and Mr. and Mrs. Geo. Alexander, Kirksville; Mr. Grissenger, Stanbury; Mr. and Mrs. Geo. S. Tompkins, Miss Belle Johnson and Mrs. M. A. Hanna, Monroe City; Mr. Geo. Rawlings and Mr. Winkler, E. K. Co., demonstrators; Mr. C. F. Bellemere of the Defender Co., and Mr. I. C. Fox from Hyatts.

Mr. Alexander, as president, had charge of the meeting. It was a very interesting and pleasant one. Mr. Rehmeier of Boonville was elected president. Next year the meeting will be held at the Gress Studio, Brookfield. On account of its ease of accessibility from all northern Missouri points it is anticipated this will be a record meeting in attendance.

## Hurrah for E. J. McCullagh

Our generally beloved brother and erstwhile President of the P. I. P. A. has distinctions heaped upon him. Some men seek distinctions, you know, and some have them thrust upon them. E. J. McCullagh earned his place in the craft and in the community in which he pursues it by unflinching, unchanging service, integrity, and clear thinking. As head of the Down Town Association he functioned so well that the Chamber of Commerce of Berkeley has elected him its Vice-President. It is all right to joke about glass hats or glass heads when the head of the jokee is so normal a shell of healthy bone filled with

the best sort of brains. May we add that our sincerity in writing these words is only to be measured with our pleasure in giving a good man his due.

## Commercial Photographers of L. A.

We had a very nice attendance of the Commercial Photographers Association of Los Angeles, Thursday evening, November 17th. Meeting at B. B. Nichols, Inc., 731 So. Hope street. President Mott gave some interesting points that would be of value to any commercial man. Secretary Fred H. Skinner spoke of his trip to Dallas, Texas, to visit Mr. L. J. Higginbotham and what he saw and learned there. There were a number of very interesting points brought out, especially on Salesmanship, and the way Mr. Higginbotham did things. Mr. Jud Hawthorne has just returned from an extended trip East, where he visited a number of studios and saw many things of interest.

## Thomas Southworth, True Craftsman

Southworth of Memphis, Tennessee, is an artist whose idealism carries him to extremes that attain greatness. He makes portraits in Carbon and, as many professionals have found, Carbon is not a profitable medium in the average studio. Southworth has found a way of eliminating the lack of speed and has otherwise simplified the process so that it becomes practical for commercial purposes. He does not keep the secret and mysteriously pursue a selfish way but writes an article minutely explaining the whole thing. This article he releases to his fellow professionals so that all may profit. We do not know Thomas Southworth except from a recent series of letters, but we are convinced he is successful, prosperous and a gentleman. The progress of his craft looms bigger to him than personal and selfish considerations.





# THE AMATEUR AND HIS TROUBLES



Conducted by SIGISMUND BLUMANN

## DRYING FILMS STRAIGHT

J. B. Loomis

The weight of the average film clip is hardly great enough to keep the wet film taut and I have found that by using developing clips and attaching a long and rather heavy nail or wire to the hooks at the bottom the desired results may be achieved. Use any ordinary clip at the top but a developing clip at the lower end of the film, hang a number in line and run your nail or wire through the lot. If you make a half loop or U bend at intervals of such a wire it will serve to keep the films from blowing against one another as they hang.

### Apertures

So many readers write asking what use they can make of the Iris diaphragm on their shutters that it is well to cover the subject briefly, once more. The larger the opening the more light is admitted, therefore the shorter the exposure. The larger the opening, also, the less sharp the image and the less flat the field, which means that at large openings things at various distances are not equally sharp. An f4.5 lens full open focussed on an object twenty feet away will not show objects fifty feet and six feet away with the same distinctness on the same negative. If you want a picture sharp and clear all over, stop down to f8 or even f16 and lengthen the exposure.

This selective sharpness and diffusion is made use of by advanced workers to suggest the different planes of height and distance. The eye really does not see with equal clearness all that it takes in, and art orders that the picture have visual, not mathematical veracity.

### Exposure and Distance

The why and wherefore of shorter exposure for distance and longer for proximity is an ever present puzzle for the amateur. Scientific explanations do not satisfy and very often the explanation fails to explain in such a way as makes unnecessary elucidation of certain optical laws which said amateur has neither time nor inclination to comprehend. Let this suffice: The further the lens is from the

ground glass or sensitive emulsion the less light reaches it. The closer the lens is to the ground glass or film, the stronger or more intense the light. Try this on your camera. Stop down to the smallest opening and focus on an electric light brought within three or four feet of the lens. Now move away twenty feet or more and focus on the same light once more. You will get the answer. The focussing will give it to you. Compare the bellows draw in each case with the other. Other factors, not less important enter into the proposition but this will suffice to make your exposures according to distance.

### Exposures

Not one amateur in ten thousand knows anything of exposure and just that many do not care to know. If you want more pictures from each roll of film or dozen plates, do you buy yourself an exposure meter and use it? Not only use it but give it a little study. Notice what it does and how it does it. Take note that the exposure at f5.6 is  $1\frac{1}{2}$  times longer than at f4.5, at f6.3 twice that of f4.5, at f8 three times, at f11 six times, and so on.

Study your shutter markings and connect them with your meter in your mind and memory. It isn't nearly as hard as it seems. Soon you will be working without trouble. Which is the best Exposure Meter? I suppose I should say any one of those advertised in this magazine but the fact is that makers of photographic things are competent and nearly every make does what it is supposed to do. Some are prohibitively complicated and some slow in operation. See them all, try them all, then choose. That is the way to learn.

### Careful Development

If you are one of the few enthusiasts who still do your own developing, do yourself the justice of working carefully, cleanly, correctly. Mix according to directions after accurately weighing the ingredients. Filter your solutions, and take heed of the temperature. Do not overwork your solutions nor keep them too long. It is cheaper to mix fresh than spoil negatives and paper.

# CAMERA CRAFT

## NOVEL PHOTOGRAPHIC COLLECTION

By Lowell C. Ferguson

Now that winter is being ushered in and our snapshooting activities are gradually merging into the background, we look forward to pleasant winter evenings, printing and developing our summer's crop of snapshots. Then there will be enlargements to make, and new formulas to try out, all of which help greatly to while away the long evenings. On the other hand if you are constituted somewhat like the writer and get no especial thrill out of the cut and dried methods of picture making you will seek something by way of variety that will afford at least a few "kicks" now and then. If we are not photographically inclined and see no relief from boredom along that line, we can resort to many of the childish pranks such as eating mashed potatoes with our fingers or playing the piano with our toes. Such pastimes, though, as a rule, afford only temporary relief, and quite often end disastrously, especially if the one performing the pranks happens to be afflicted with a "better half."

Ye writer, having passed through many dull winter months doing the usual routine, conceived the idea of a novel collection of photographs that will afford the most case-hardened individual quite a number of periodical thrills. If you like to collect photographs and are an ardent movie fan, you will eat up the idea. The process involved is simple. The stock methods of developing and printing are used—the novelty consists of the material from which we obtain our pictures.

Assuming you have a simple outfit for making prints, etc., we shall start.

Now go down to any movie theater and ask for scraps of film. These scraps will undoubtedly be portions of well known plays containing interesting scenes, and possibly a close-up of your favorite player. Make several trips to various theaters and you can get a large assortment of interesting films. Some of these strips will probably contain only three or four individual exposures, but that will serve our purpose.

Now look over the assortment of films and pick out the scenes which appeal to

you most and lay them aside. Mix up some developing solution for films and you are all set. Clean the strips of movie film with alcohol in order to remove any grease and grime. Put several strips of the films in the printing frame, emulsion side up and cover with a sheet of commercial film, emulsion side down. Close the frame and expose, by burning a match in front of the frame at a distance of three feet. Keep the match moving. Take out the sheet of film and develop—presto! You have a variety of negatives from which miniature contact prints can be made, as well as enlargements. If the negatives are sharp, postcard enlargements, or even larger can be made without a great loss of detail. The negatives are enlarged in the usual way: viz, masking the individual exposure and putting it in the camera.

A good stunt is to put these pictures in an album, having the close-ups on one page and the long, medium and full shots on other pages. Interiors, exteriors, etc., can be placed on separate pages. A good plan, too, is to ask the theater man the name of the play, actors, etc., and letter these in the album.

All in all, the idea should prove interesting to anyone who makes picture collecting their hobby.

## WRINKLE FOR MAKING ENLARGEMENTS

By L. C. Ferguson

The following method for making enlargements will doubtless be of interest, as it enables the photographer to obtain GOOD enlargements every time, with no waste of paper. No trial exposures or guesswork enter into the scheme.

The apparatus consists of the usual enlarging camera and easel. The easel, however, is covered with oil-cloth. The rest of the apparatus consists of a broad camel-hair brush and a dish of developer, together with the usual enlarging paper. To make the enlargement, put the negative in the camera in the usual way and focus on the easel to the size desired, and mark the position with thumb tacks. Turn off the light and fasten the paper on the easel. Now dip the brush in the developer and swab it on the paper until it is thor-

## CAMERA CRAFT

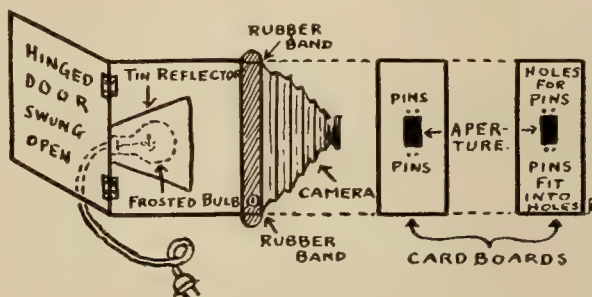
oughly soaked. Turn on the light and the enlargement DEVELOPS as it EXPOSES. Turn off the light every few seconds and watch the progress of development by the ruby light. Keep swabbing on developer and exposing until completed. Certain portions of the picture can be held back by the application of acetic acid, sparingly applied.

The advantages of this method are apparent. No guesswork, no wasted paper. Four ounces of developer is sufficient to develop three or four 8 by 10 enlargements, or its equivalent.

### Measuring Distances

It is possible to become quite accurate in measuring distances while making expos-

ures by training the eye with continuous practice to gauge a certain number of feet. Thus, if you will decide on six feet, let us say, and try again and again, in different places and under different conditions of surface and light, you will soon find it a simple matter to measure ten feet by sighting at the six feet to which you are used and adding half as much and a little more. In the course of time you will plump at all sorts of distances up to twenty-five or thirty feet, which is all that is needed in ordinary photography. Beyond that perspective and illusionary shortening of space will deceive you unless you specially train your eye for that, too. Do not pass this idly by but try it.



### ENLARGING CAMERA FOR CINE FILMS

By L. C. Ferguson

The apparatus shown in the sketch will doubtless be of interest to those who have still cameras using standard film and wish to make enlargements. The apparatus is quite simple and costs but a few cents to make, yet is quite as efficient as many of the "store" enlargers selling anywhere from ten to fifty dollars.

To make the apparatus you will need a few half-inch boards, a 50-watt frosted bulb, a tin reflector, and the usual wood-working tools. The tin reflector is of the type shown in the sketch and can be made at a tin shop for a few cents.

The lamp house is first constructed, and is made of sufficient size to accommodate the camera you will use. A good pocket kodak in which the back can be removed is ideal for the purpose. One side of the lamp house is hinged to give access to the interior. The front of the "box" has an aperture cut to correspond with the size of the negative you are using, and has

four pins at top and bottom edge of aperture to hold the film. Incidentally, the front of the "box" is to be made the same size exactly as the back of the camera. The camera is held in position by two stout rubber bands passing over the camera and front board of the "box".

To operate, the negative is placed over the pins at the aperture and a sheet of cardboard with a corresponding aperture is placed over it. This holds the negative flat. The cardboard also has four holes in it to slip over the pins. The camera is now placed over the cardboard, the rubber bands adjusted, the light turned on, and exposure proceeds as per usual.

Do not have the bulb too close to the aperture as the heat may buckle the film. If desired, glass sheets could be placed at the aperture, thus holding the film securely. However, the device is quite efficient as it is and will do your enlarging easily and quickly. No condensing lenses are needed as the negatives are so small that the frosted surface of the bulb covers it evenly.



SALON WEEK  
IS COMING

EVERYPRINT  
A WINNER



# CLUB NOTES



## Forthcoming Exhibitions

March 5 to 31, 1928. Second Biennial Salon of Pictorial Photography of the Syracuse Pictorialists. Address Kent C. Haven, director, 340 Montgomery Street, Syracuse, N. Y. Closing date February 10th.

March 17 to April 15, 1928. Pittsburgh Salon. Address B. H. Chatto, Secretary, 1300 Milton Avenue, Pittsburgh, Penn. Closing date February 4th.

February 11 to 25, 1928. Sixty-sixth Annual Exhibition of the Edinburgh Photographic Society. Address Gilbert Cousland, Hon. Exhibition Secretary, 117 George Street, Edinburgh, Scotland. Closing date January 28th.

March 9 to 27, 1928. First International Salon of the Association of Czechoslovak Clubs of Amateur Photography. Address Jan Volny, Secretary, Liliova 8-111, Prague 1, Czechoslovakia. Closing date February 1st.

Second International Salon of Japan. Dates to be announced later but entry blanks available by the time requests reach R. K. Narusawa, Tokyo, Asahi Shimbun, Tokyo, Japan.

## FORT DEARBORN CAMERA CLUB, CHICAGO



If the owners hadn't torn down the old building we should have been there yet. But torn down it was, almost over our heads, so we moved to new and elegant quarters and took the opportunity and had a "Housewarming Party." Here is a picture of those of us who stayed to the wee, sma' hours when the flash was made. I was not invited so didn't take the first train to Chicago. And I'm sore.

S. B.

## CAMERA CRAFT

### Associated Camera Clubs of America

The present administration of the Associated Camera Clubs of America, which is drawing to a close, has been perhaps the most successful and constructive in the history of the organization. The adoption of a new Constitution and By-Laws, and the awarding of prizes and trophies for Interchange and Salon Exhibits should be of great benefit in the coming administration.

The following have been unanimously elected officers for two years, commencing January 1, 1928:

President, Julius Cindrich, Los Angeles, Calif.; vice-president, P. T. Tarnoski, Chicago, Ill.; secretary, H. G. Cleveland, Cleveland, Ohio; treasurer, Ralph B. Bonwit, Baltimore, Md.

### California Camera Club

The William Mortensen collection of prints was on the walls all of December and we fervently hope the entire lot may be kept intact as a permanent exhibit for the American National Photographic Society when it becomes a reality. Smithsonian Institute take notice. We had forewarning of the superlative merits of the Mortensen pictures from New York and they live up to the highest praise accorded them.

### Fort Dearborn Club Salon

The Fort Dearborn Camera Club will hold its annual members' exhibit at the new club rooms, 537 So. Dearborn Street, Chicago, from January 27 to February 11.

This show was postponed from the regular schedule in November, due to the fact that we moved into much nicer quarters at that time.

The exhibition rooms will be open evenings. Those interested in Pictorial Photography are assured a friendly welcome.

### The Cleveland Photographic Society School of Photography

**PORTRAITURE**—Basic system of lighting of head and shoulders. Figure and group work. Practice. Special pictorial lighting demonstrations. Every Friday evening, starting October 7.

**TECHNIQUE**—For the beginner. Elementary picture composition. Cameras, exposure, color values, chemistry and lenses. Developing, intensifying, reduc-

tion. Printing, enlarging, toning, finishing. Plenty of practice work. A complete course for the beginner. Every Friday evening, starting October 7.

**PICTORIAL PHOTOGRAPHY**—Group work for the advanced worker. Print criticism, bromoil, carbon, gum, for salon and exhibition work. Congenial group practice for the serious photographer. Every Friday evening, starting October 7.

**LECTURES, TRAVELOGUES, SPECIAL DEMONSTRATIONS**—every Wednesday evening in addition to classes. Competent instructors and lecturers amid friendly surroundings.

**STUDIO, DARK AND WORK-ROOMS**, lecture and exhibition hall, lounge room. All available to members without additional cost over regular dues.

### CLASS PROGRAM FOR OCTOBER

Oct. 7—Portrait: Demonstration of light on head and shoulders. Technical: Cameras and exposure. This is the class for beginners. Pictorial: For advanced workers. Print criticism. Bring down a print.

Oct. 14—Portrait: Practice last week's demonstration. Use your own camera, or have 5x7 holders for club camera. Technical: Chemical mixing for printing. Printing papers. Pictorial: Enlarging for bromoil. Have bromoil enlarging paper and a lot of negatives.

Oct. 21—Portrait: Demonstration of Balance in light. Technical: Elementary Picture Composition. Pictorial: Bromoil Bleaching.

Oct. 28—Portrait: Practice last week's demonstration. Technical: Chemical Mixing of Negative Developers. Pictorial: Bromoil Inking.

Note: There are no hard and fast class rules. The work is largely practice. You may take only part of the work, say printing or composition, etc. Have a note book. Don't try to remember! Classes start about 8:15 p. m. and end about 10 o'clock. In the pictorial group only advanced workers will get the most benefit.

### Cinema League Cruise

A foreign cruise arranged entirely for making amateur motion pictures while enroute is the newest adventure planned by the amateur movie makers of America, through their national organization, the Amateur Cinema League, according to

## CAMERA CRAFT

**Amateur Movie Makers**, official magazine of amateur movie fans.

The picturesque and historical "locations" of the Mediterranean will be the goal of this first cinematic tour. Anyone who has an amateur movie camera will be eligible as a cruise member. The new White Star liner S.S. Doric has been made available for the tour through the James Boring Travel Service and will sail from New York on February 8, 1928. The cruise will last for sixty-two days, and all of the important Mediterranean ports of Europe, North Africa and Asia Minor will be visited, and side trips will be made to many interior cities.

The Doric will be equipped as a huge motion picture studio with all the necessary apparatus for movie making. Expert cinematographers will accompany the cruise to aid and guide the amateur movie makers.

This unique plan, it is said, is an outgrowth of the national popularity of personal motion picture making, which now numbers scores of thousands among its devotees. As a majority of these amateur movie makers are also great travelers, this movie cruise is designed to effectively combine both hobbies.

### Durban Club Salon

The Durban Camera Club of Durban, Capetown, South Africa hold their photographic exhibition and competition beginning November 23 and as notice reached us just as we were preparing to go to press with the present issue it will of course be impossible for our readers to get prints there on time. We would however, call attention to the efforts made by this organization to carry the spirit of pictorial photography into the utmost corners of their part of the world and consider it the duty of pictorialists to enter into the spirit and encourage the ambitions of the Durban Club by sending liberally of their best on future occasions.

### The Chicago Camera Club

If we were to express in every issue how our hearts and fancies go across the continent to the fellow members and real friends we feel we have made in remote places, someone might write us another letter accusing us of Bull for Profit. Let any warm hearted human who has sat in

on any of the nights when we foregathered and shot hot schrapnel at one another examine his own feelings and say if he felt he was practicing or having practiced upon him Profitable Bull. Those who have visited Latitude 41-38-13, Longitude 87-8-30 West of Greenwich, which will be computed at 31 West Lake street in the purleous of Chicago, may be interested to know the new officers. Here they are: Clayton W. Mogg, president; R. L. Farrington, vice-president; E. C. Mercer, secretary; L. B. Mayo, treasurer.

### LOS ANGELES CAMERA CLUB

Henry Hussey, director of the San Francisco Salon and a prominent pictorialist, was a recent visitor at the Los Angeles Camera Club.

Four members of the Los Angeles Camera Club had pictures hung at the 22nd Paris Salon. They are R. L. Van Oosting, Fred Dapprich, C. L. Southard and Milton Inman. Dapprich and Inman also exhibited at the recent London Salon. This is the first time in several years that members have contributed to the foreign shows.

To stimulate studio photography R. N. Fuller of the Los Angeles Camera Club has offered a silver cup for the best work done in the club studio during the winter. One of the rules is that the work must be entirely by the individual member, including the mounting. One meeting a month will be devoted to discussion and demonstration of portraiture and studio work. Lighting, pose, character rendering and the technique of development and printing will be considered and given practical application. During the evening those members who wish their portraits made will have the opportunity of sitting before the camera.

Under the enthusiastic direction of Foster Daniels, a section of stereo workers has been started at the Los Angeles Camera Club. At a recent meeting the stereo fans proudly brought their camera and viewing boxes for comparison, and began their untiring discussion of separation, viewpoint, etc. The meeting was at least profitable for the supply dealers, for one member bought a \$150 outfit after seeing the others.



# NOTES & COMMENTS



## Lenz Rotary Print Washer

Makeshifts may serve and they may fail. Desultory washing may eliminate the hypo or it may not. Your customers will find out whether or not when the prints begin to turn and you will know they have found out when you lose your business. The Lenz Rotary rids the prints of the last trace of hypo. Your chemical test will prove it. A machine that does that at a low cost and in the minimum of time is worth its weight in gold, yet the Lenz is comparatively cheap. Write to the Lenz Washer Company, Lebanon, Missouri, and inform yourself of all the facts. Your interests demand that you do so.

## Goerz Reflex Focuser

Owners of certain Motion Picture Machines have been hampered in the execution of particular plans by the inability of critical focusing and seeing the image on a ground glass. This device offers a relief from that deficiency. Machines with qualities that make them otherwise preferred now become complete even to this detail. This device has other uses and we hope to give our readers a complete knowledge of those uses in a future issue. In the meantime the C. P. Goerz American Optical Co., 317 E. 34th Street, New York City, will gladly send circulars on request.

## Karl A. Barleben with New York Institute

The New York Institute of Photography, following its usual policy of securing recognized experts as members of its staff, recently secured the services of Mr. Karl A. Barleben, Jr. Mr. Barleben has charge of instruction in motion picture photography in the resident school of the Institute.

He is well known throughout the country as the Cine-editor of "American Photography". He is also a member of the Society of Motion Picture Engineers and is widely recognized as an authority on

both the taking and projection of motion pictures.

No other professional school in the United States has, or has had, as many widely-recognized authorities upon its staff as has the New York Institute of Photography. The staff and advisory board of this Institute are composed of men, each of whom is widely known and recognized as an authority and a leader in his particular field. Free information about its resident or correspondence courses will be sent to anyone addressing the New York Institute of Photography, 10 West 33rd Street, New York City.

## Nippon Crepe Paper

At regular intervals Ansco hits the center and makes good with something new, outstanding, superlative. The Memo Camera startled the photographic world and gave the trade a glad time. Ansco Bromide established a very high standard for enlarging papers, and now comes Nippon Crepe, a contact paper for the ultra portrait photographer. The surface is an exact simili of the fashionable flat crepe silk, it looks like pure silk, it has the wrinkly effect of crepe, yet is flat and in no wise distracts from the picture. But the important thing about it is the emulsion. Wonderful. The latitude and the tones are what portraitists yearn for and dream about.

Least, but appealing, is the method adopted by Ansco for the merchandising. The sample book which the salesmen carry is bound in Ooze Calf, imprinted in Japanese fashion. The paper comes packed in a container that is itself a work of art, patterned in black and gold, with gold seals, inside double wrapped in Japan Tissue again sealed with gold-embossed stickers. Pride in the product is generally an evidence of excellence. If you have not seen Nippon Crepe, make it your business to do so. Make it your pleasure.

## CAMERA CRAFT

### Deek's Color Process

C. J. Deeks, of Sea Cliff, N. Y., has succeeded several times in manufacturing color sheets that satisfied the profession, but has repeatedly withdrawn them because they failed to approximate to his idea of excellence. It seems from reports that the process is now virtually perfected and we may hope to find on the open market the wherewith to make prints in the true colors of nature without prohibitive cost or unattainable skill.

### School in Coloring Photographs

We are informed that the Japanese Water Color Company of Diamond Place, Rochester, N. Y., is prepared to enroll a few more Correspondence Students in its School in Coloring Photographs. Leaving aside any direct compliments we can gather from the fact that many were turned aside because of the impossibility of giving them personal attention in 1925 and 1926, that the enrollment will be large in 1928. Have your application in early.

### Imperial Dry Plate Company

At last the complete line of sterling products made by the Imperial Dry Plate Company may be obtained in this country. G. Gennert, Inc., 24-26 East 13th Street, New York City, their United States agents, are stocked and prepared to meet the demand. Imperial Plates have long been known as standards of excellence,—Eclipse was a term with which to conjure,—and now Excelsis Films are gaining a like place in popularity.

### Club Men Honor Manufacturer

More than 300 of the social and financial leaders of Rochester, N. Y., gathered together Thursday, November 10th, to pay a tribute of affection and respect to William Bausch, secretary of the Bausch & Lomb Optical Co.

The occasion was the celebration of Mr. Bausch's twenty-fifth anniversary as president of the Rochester Club, the leading as well as the oldest social organization in the city.

A judge of the state supreme court, a poet, club members and representatives of employes of the club told in their various ways of the deep friendship they feel for the "father of the Rochester Club."

A silver vase was presented to Mr. Bausch by the club members. The vase was filled with twenty-five American Beauty roses, a token of esteem from the employes of the club.

### The Hampton Studio

E. W. Hampton, of the well-known Hampton Studio, is opening a new ground-floor establishment in Springville, N. Y. It is to have the latest in equipment and the most modern lighting system. Success to you, Brother.

### Atelier Judith

Miss Judith Martinez, an artist with the brush as well as camera, has opened a studio for the taking of portraits, coloring of pictures and making of miniatures, for the public and her fellow professionals. The lady's work is outstandingly fine and her pastel portraits have all the vigor of oils without the loss of that delicacy which belongs to pastel alone. Paradoxical, but subject to proof. The Atelier Judith is charmingly situated at 2031 Vallejo street and its Bohemian furnishings and decorations make it a bit from out an old-world Quartier.

### Mallinckrodt Chemicals

Year after year the Mallinckrodt Chemical Works of Saint Louis has produced developers and photographic chemicals that were meticulously right. The firm was overmodest in its claims and somewhat retiring for modern merchandising ways, but the goods became established and standard. Now there is no excuse for any photographer to accept anything but the best. Every dealer stocks the line. You will never want any but Mallinckrodt when you try them out.

### Carl Zeiss, Inc.

Zeiss, a name with which to conjure. Erstwhile best known for its Tessars, but now equally famous for its cameras. Ica is to cameras what Tessar is to lenses. You should familiarize yourself with the supplementary lenses which make a telephoto or a portrait lens of your Tessar. You should investigate the Ica line of cameras before you buy a camera. Carl Zeiss, Inc., of 485 Fifth Avenue, New York, 728 South Hill Street, Los Angeles, or any first class dealer will make it easy for you to become informed.

## CAMERA CRAFT

### Joseph M. Bing Injured

That genial human dynamo who constitutes the vitality of Drem Products in this country, had the misfortune to mix things with an automobile and when the irresistible force met the immovable body, the latter suffered a broken leg. Friend Bing tells it with humor, although at the time of writing he was in a hospital bed with the fractured limb in a cast. Speedy recovery and a perfect set to you, your hundreds of friends join in the wish.

### Eastman Products

Everyone knows Kodak, spelled with a capital K or untold penalties shall be exacted. Everyone knows Velox, and Elon. If everyone doesn't know Cine-Kodak and Kodoscope it is because everyone has not as yet gone into motion picture making. Everyone should know that Eastman plates and papers and chemicals are of the highest photographic purity. That the Rochester plant was one of the government's resources during the war and is one of the nation's honors at all times. The Kodak Cine Library is a world-wide institution. Its products are so numerous that even its extensive advertising cannot cover them all. What do you know, Mr. Amateur of the Kodak Syphon, a simple, inexpensive device that makes any tray a running water washing machine? What do you know, Mr. Professional, about the new printing machine with its One Point Light Source and its wonderful system of diffusion? If you do know, "Nuff Sed," but if you do not, go to the nearest Eastman Kodak Store and be shown.

### Dallmeyer of England and the World

Somehow the name Dallmeyer is associated in our mind with what has been and is best in photographic objectives since photography began. Away back in the dim memories of our early days as an ignorant amateur we looked up to Dallmeyer and hoped for one of his lenses. Dallmeyer has gone his way, and many a great man in the firm has followed, but the name remains as a banner and a shining beacon. We own a Pentac and if we were a portraitist we'd own a Stigmatic and a portrait Dallmeyer. Would you know why? Write to Herbert and Huesgen, 18 East 42nd Street, New York.

### Willoughbys

Christmas time always, somehow, brings this firm to our mind. A kindly man's name established for a kindly house of business. A place to go when in need of material goods and a place to find a helpful spirit and an undeviating integrity wrapped up in every bundle. Every purchase represents equity, a dollar for a dollar's worth, a full dollar's worth for every dollar, and for good measure cheerful service and a spirit of kindness.

### George Murphy

We are thinking of the individual more than the firm, though George Murphy, Inc. has a great place in the trade. The old man whose name graces the business is the youngest man we know. His warm heart and cheerful manners are perennials that bloom forever and do not wilt under stress or unfavorable conditions. In fact George recognizes no unfavorable conditions. May the New Year begin another era of prosperity for him and those connected with him.

And to Percy Howe who has also endeared himself to us in a dozen ways, best wishes and the compliments of the season.

### Acknowledgements and Thanks

Hundreds of letters and Christmas cards from readers, firms and friends we learn to know, perhaps for the first time, came to Miss Reed and myself, this year as in previous years. We yearn, each season, to send a personal and individual greeting to each of them but the dictates of the heart are curbed by the physical impossibility. May we therefore in these lines acknowledge our happiness and pride and express our gratitude?

Camera Craft, which is our constant contact with all of you, must therefore, and should convey the good-will and affection in which we hold all the world and if we have succeeded in making the magazine what we wish it to be, then Camera Craft does indeed come to you from us with something more than pages of reading matter and pictures. God willing we desire to have it always a home to home, heart to heart message. Thank you all, dear friends.



# CAMERA CRAFT



A REAL BABY

G. ED. WILLIAMS

SAN FRANCISCO

CALIFORNIA



# Gevaert



## FOR PERFECT PICTURES ROLL FILM FILM PACK

Extreme Speed  
Non-Curling

Orthochromatic  
Non-Halation

IN SIZES TO FIT ALL CAMERAS

### NOVABROM

A fast, general purpose enlarging paper. Ideal for perfect prints by projection methods with minimum time and complete control — requires no special developer.

*Descriptive Catalog at Your Dealer's or*

**THE GEVAERT CO. OF AMERICA, Inc.**

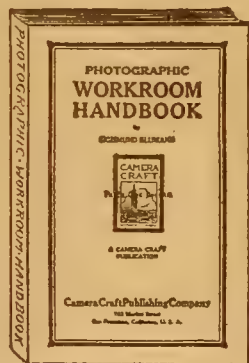
423 WEST 55TH STREET, NEW YORK CITY

CHICAGO, ILL.  
413-21 N. STATE STREET

PORTLAND, ORE.  
345 SALMON STREET

TORONTO, CAN.  
131 YORK STREET

*Dealers in Principal Cities of United States*



*Photographic*

# Workroom Handbook

By SIGISMUND BLUMANN

**Price \$1.00**

Nothing but essentials, nothing untried, and nothing but what may be of constant use. What is wanted right at hand when wanted, in fewest words.

*At your dealer or from*

**CAMERA CRAFT PUBLISHING COMPANY**

CLAUS SPRECKELS BUILDING

SAN FRANCISCO, CALIFORNIA







BUNNIES  
*Beidler Studios*

# CAMERA CRAFT

*A Photographic Monthly*  
SIGISMUND BLUMANN, EDITOR

*Claus Spreckels Building, San Francisco, California*

FOUNDED MAY 1900

VOL. XXXV

FEBRUARY, 1928

NO. 2

## The Los Angeles Pictorialists

Their Annual International Salon Reviewed

By Phil Townsend Hanna

Illustrated by reproductions from some of the prints

The relativity of all things being stipulated, a critical evaluation of the Eleventh International Salon of Photography, conducted under the auspices of the Camera Pictorialists of Los Angeles, and held at the Los Angeles County Museum, January 3-31, becomes an infant's pastime.

The criterion of good pictorial photography is quite as mutable and transient as ever. For the sake of pointing these remarks, let us consider pictorial photography as an art. And to get down to first principles let us define art. All definitions are more or less fatuous. I can recall half a dozen. One will do as well as another. Oscar Wilde's epigram that art is the conversion of an idea into an image is satisfactory. The excellence of a work of art, then, becomes proportional to the artist's ability to express this idea in image form.

Virtuosi of the camera wax and wane like the seasons. In this they differ not at all from practitioners of the other arts. They suffer and benefit from circumstances and environment—pathological loves and livers, a case of *Veuve Clicquot*, the plausives of the *canaille*, the devastating mockery of critical gentry, and a thousand other inconsequential conditions totally extraneous to their business.

Hence, the transiency of the criterion—the constant and continual fluctuation of the standards of pictorial photography. The case of M. Leonard Misonne illuminates my point. Ever since yours truly can remember M. Misonne has worn the purple. He was, I've been assured times without number, in tones both reverent and obeisant, the pontifex maximus of the craft. About him has sprung up a cult of devout worshippers, singing hosannas to his name. At times his work has been exemplary. Last year I thought him "incomparable." But, judging from the opera he has hanging this year—I shall be charitable and draw the curtain with the observation that M. Misonne, I fear me, has reached his aesthetic menopause.

## C A M E R A C R A F T

Throughout the salon, evidence of this curious fluxation is manifest. Some 313 prints hang upon the gallery walls. Of these 123 evoke reactions of profound satisfaction. Something like nine never should have been hung. The balance are mediocre compared to the best work in the show. (Bear in mind that we stipulated all things—even the prints in photographic salons—to be relative). The lines of demarcation that separate the prints qualitatively this year are sharper than ever before. Exemplary entries will not total more than a dozen; execrable entries a like number—but the show will gain a high repute from the former and not suffer a whit from the latter. The great middle class will awe the laity and furnish topics for ceaseless disquisition to the initiated. So it is, like a Hollywood cat party, a howling success.

In the margins of my catalog I made numerous notes on the quality of the prints, without reference to or knowledge of the identity of the entrants. These notes permit me to list the makers of pictures that impressed me as outstandingly good.

Robert A. Barrows, Philadelphia  
 Imogene Cunningham, Oakland, Cal.  
 Farciot Edouart, Hollywood  
 Arthur Ermates, Hollywood  
 Frank R. Fraprie, Boston  
 G. H. S. Harding, Berkeley  
 H. R. Heath, London  
 Charles Job, Richmond, England  
 H. S. Kaito, San Francisco  
 A. F. Kales, Los Angeles  
 Alex. Keighley, Steeton, England  
 M. Kokobun, Los Angeles  
 K. Kojimoto, San Francisco  
 A. Kono, Los Angeles  
 James A. Lawshe, Los Angeles  
 Monte Luke, Sydney, Australia  
 Ella E. McBride, Seattle  
 Mai Miyamoto, Los Angeles  
 Edward B. Mudge, Bellaire, L. I.  
 Louis R. Murray, Ogdensburg, N. Y.  
 M. A. Obremski, Syracuse, N. Y.  
 K. O'Hara, Los Angeles  
 K. Ota, Pasadena  
 Wm. M. Rittasse, Philadelphia  
 Dr. D. J. Ruzicka, New York City  
 P. F. Squier, East Pittsburgh  
 Dr. Max Thorek, Chicago  
 Alfonso Weber, Chicago  
 Fred R. Archer, Los Angeles  
 Herbert Bairstow, Halifax, England  
 Johan Helders, Ottawa, Canada

Torazi Mayeda, Los Angeles  
 Ernest M. Pratt, Los Angeles  
 F. C. Baker, Cleveland, Ohio  
 John B. Eaton, Victoria, Australia  
 Carl C. Distler, Newport, Ky.  
 John Paul Edwards, Oakland, Cal.  
 Robert H. Goodsall, Whitstaple, England  
 Fred Judge, Hastings, England  
 Harold Leighton, Bradford, England  
 T. Mukai, Los Angeles  
 Joseph Petrocelli, New York City  
 Otis Williams, Los Angeles  
 K. Asaishi, Los Angeles  
 Louis F. Bucher, Newark, N. J.  
 Will Connell, Los Angeles  
 Gordon H. Coster, Baltimore  
 J. Ortiz Echaque, Madrid, Spain  
 Tomihisa Furuya, Pasadena  
 P. Y. Homma, Los Angeles  
 Stephen Jasienski, Bienne, Switzerland  
 Harold N. Jones, Victoria, Australia  
 Dr. K. Koike, Seattle  
 Dr. William F. Mack, Los Angeles  
 Edward P. McMurtry, Pasadena  
 C. J. Marvin, South Pasadena  
 Dr. L. G. Saunders, Saskatoon, Canada  
 Dr. John F. Stephan, Cleveland  
 C. J. Lymes, Birkenhead, England  
 K. Takahashi, San Francisco  
 G. M. Taylor, Atlin, Canada  
 Clark W. Thomas, Los Angeles  
 J. M. Whitehead, Alva, Scotland

Such an appraisal, admittedly, is no indication of the capabilities, or lack of capabilities of pictorial workers, for missing entirely from this list are the names of such eminent artists as Genthe, Berssembrugge,





MURIEL EVANS  
*A. F. Kales*

Dapprich, Drtikol, Laura Gilpin, Foreman Hanna, Sophie Lauffer, Misonne, Mortensen, Ravell, Sheahan, Sterling, Struss, Suchy and others. But it is a demonstration of the ebb and rise in the tide of each individual's work.

It is impossible in a limited space to give consideration to the merits and deficiencies of such a large number of prints. This critic, however, would feel delinquent were he not to pull out all stops and let go for the few transcendent prints in the show.

Possibly the high light of the salon is the lone entry of William M. Rittasse, of New York, a bromide entitled, "So This Is New York." I haven't visited "the city" in fourteen years, but I think the subject is the Woolworth tower. The view is a snake's eye perspective—a captivating angle to view architectural triumphs among other things. Two, or possibly three, phases of New York, its customs and manners, are symbolical. One is its noise, another its crowds, and the third, its architecture. Rittasse has presented the latter amazingly in this superb composition.

Arthur Kales' red-chalk bromoil transfer, "Muriel," shares the honors with Rittasse's opus. The print is a glorious portrait of a seductive and charming girl.

The increased use of photography in the production of advertising copy can't help but follow the exhibition of such engaging studies as Fred Archer's "Advertisement," and Ernest M. Pratt's "Secret of the Pearl." The former is an industrial subject, showing the manufacture of oil-well casing. One can't avoid the feeling that precision and skill and high-grade materials are being incorporated in this prosiest of commodities. So when one drills his next oil well—as most of us out here in California do on occasion—why one just can't forget McGimmick's Oil Well Supply Company.

Pratt, on the other hand, has put a trifle more romance and lure (yes, it is possible) into an advertisement for one of the most expensive of perfumes. In the field of advertising photography, I'm told, Pratt is the grand swami. I won't challenge the characterization.

There's something a trifle different in Fred Judge's "Labour," a bromoil transfer. The "something" defies rational analysis as all good art should, but the print packs a wallop that paralyzes the reason and sends a million or two more hormones rushing through one's vitals. It's one of those things that can't be discussed. See it, feel it, but don't try to understand or explain it.

Photography has, to drift into pedantry for another dreary moment, but one real force at its command, and that is light. It bases its color and, oft-times its composition, upon light. Sad to relate the majority of pictorialists know entirely too little about its potentialities. Not so Johan Helders, however. His bromide, "Castle of Light," would be charming under any lighting, but the pattern of golden glow that he has caught strategically makes this print a classic.

CAMERA CRAFT



SO THIS IS NEW YORK!

*William M. Rittasse*



## CAMERA CRAFT



*The Procession*

*Herbert Bairstow*

I gave a loud cheer for the fine showing of portraits in last year's salons. This year they are deplorably scarce—only fourteen out of a total of 313 prints. Portraiture is the incontestable domain of photography. It isn't an easy path for the novice but there's a world of satisfaction in it and more workers should essay it. Kales' "Muriel" is an example of what may be done. So, too, is the portrait of "Otto Natiesen," a bromide by Arthur Ermates, and a mighty good one, too.

While I have the floor I want to add my execrations to the curses piling up generally over the tendency of occidentals to imitate the Orientals in composing photographs, the chief element of which is design. This trend among the Japanese is legitimate expression of their racial psychology. It is as anomalous among Caucasians as would be the sight of Billy Sunday tending bar in Tex Guinan's. The penchant for glorifying design is praiseworthy. But let the attitude and approach be more in consonance with individual and national behavior.

In conclusion, I'm delighted to report that the missionary efforts for standardized mounts, which I have labored at so long and diligently, are beginning to be fruitful. Lace-paper valentines of other days seem to be passing, praise be to Jehovah, and in their place we are finding dignifying and unobtrusive mounts that perform the service a mount is designed to perform, i.e., furnish a suitable neutral background for the print. Many workers are gravitating to the 14x18 inch size which seems to be ideal.

# Portraiture by Flashlight

By Thomas Southworth

Illustrated by the Author



Of the five illuminants available for negative making—Daylight, The Flaming Arc, The Mercury Vapor, The Incandescent Electric, The Flashlight—there is little doubt but that the Flashlight is the least in favor. This statement must be taken to apply to the ordinary demands of the studio for single figure and small group sittings.

This merely indicates a condition but does not offer a reason for that condition. There surely must be one, or several, somewhere. Let us see if they can be found.

The Flashlight was the first artificial illuminant available for negative making. First used as a makeshift when daylight was unavailable, in the making of groups and parties which otherwise could not have been photographed. This probably runs back about 40 years. As one might expect, the flashlight powders to be had during the earlier years of its manufacture, were very much inferior in actinic value to those of later years. It seems to me that the Flashlight got off with a bad start, and I'm not certain that the manufacturers weren't largely responsible for this, else why would it have become so common a practice amongst photographers to invariably turn out all lights when about to make a flashlight exposure. This undoubtedly explains what is known as "the flashlight effect" when as a matter of fact the flashlight had nothing whatever to do with it. The resultant photograph was simply that of how people look in the dark. It seems also to have been generally understood that in the making of a flashlight picture the light must come from a point in the immediate vicinity of the camera—even by those who understood that in the making of daylight exposures the light must come more from one side and higher—and this, of course, yielded nothing but flat map-like outlines of the figures, and many people, including photographers, think of Flashlight in terms based on these former results, even down to this good year. To these two described conditions must be added the objection of the loud report from the firing of excessive charges of this inferior former quality of powder. And the smoke. The smoke.

## CAMERA CRAFT



Figure 1

*Thomas Southworth*

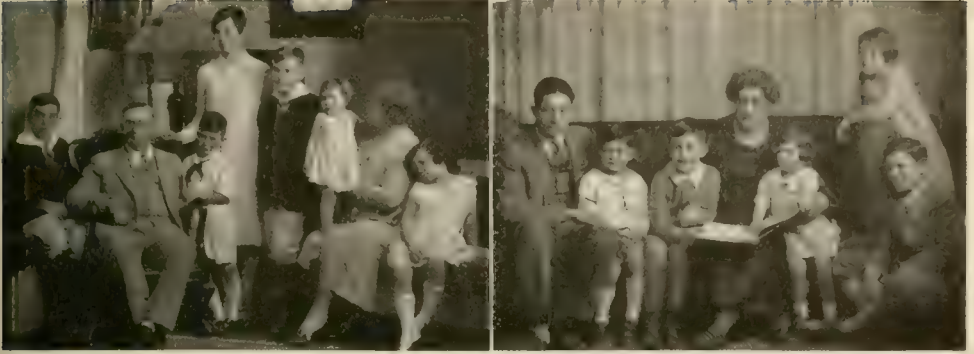
Thinking of the Flashlight today in these terms is not unlike the going back to the home of his boyhood and expecting to find his old schoolmates still playing marbles and wearing knee pants on the old schoolhouse lot, unless the one whom these specifications fit is related to the ostrich.

But from its rather crude beginning the Flashlight has been so improved in the making of portraits as an every-day illuminant notwithstanding the availability of other highly-developed illuminants, including daylight, that it is entitled to the consideration of all photographic workmen not hampered by prejudice.

Whilst in former years flashlight charges were measured in terms of ounces or fractions of ounces, and still are, of course, in the making of very large groups and dark interiors with slow-working lens, in ordinary portraiture one now measures the improved manufactures of it in terms of units of grains. My illustration No. 1 was made with ONE-HALF OF ONE GRAIN.

But someone may say that the Flashlight startles the sitter on account of the noise, the smoke is quite a nuisance, and it's a lot of un-





Figures 2.

*Alternate*

necessary bother, re-loading for each exposure. Such an one is probably still playing ostrich. It is very true that flashlight exposures cannot be made either without noise, or smoke or extra effort in the matter of preparation for each exposure, but would it not be well to look into the matter as to what extent these features of flashlight procedure have been minimized and more especially the advantages of its use that may not be claimed for any other illuminant. After all, the selection of an illuminant, like a plate, a film, a developer, is only a means to an end,—the resultant print that is later handed the customer,—and if there is one thing about which one may be quite certain in the making of comparisons of photographs made with different illuminants by photographers of equal ability, the Flashlight product is going to receive the highest consideration. During the 17 years of my exclusive use of the Flashlight I have been influenced by others, probably without their knowing it, to deviate just a little to see if I might not be “kidding” myself about the Flashlight. On each occasion, I had to get back, did it without urging, and that in a hurry. Not sorry for brief digression, on the contrary, quite pleased to find I had been making no mistake.

But those are merely unsupported claims of a Flashlight enthusiast. I did not start out with any idea of proselyting. My motive is that I might, with 17 years of uninterrupted use of the Flashlight behind me, be an aid to some of lesser experience and others who may not have had equal opportunities or the inclination to contribute to Flashlight progress, as I may have had.

The use of the Flashlight illuminant is probably at its best advantage for the man pursuing the Home-Portrait branch of the photographic business. Such has been my work during the period mentioned, although, I hasten to interpose, were I to go back to my former studio practice, the Flashlight should follow me there. This advantage comes chiefly from its independence of disturbing the regular electrical facilities of the average home. On one occasion only of my career have the lights gone out just as I was about to “expose the blushing bride” with a house



Figure 3

Thomas Southworth

full of guests standing about. I had a hard time convincing her that I had not even tapped in on any of the sockets (at that time I was getting my ignition from my own portable batteries), but I've heard other brides speak up and 'spress themselves not very complimentarily about others who did not have near so good an alibi.

But let's get to our knitting.

Noise in Flashlight Portraiture is no longer a serious factor. My illustration No. 2 of a family group represents just about the peak of what I am ordinarily called upon to photograph. This is one of probably 8 or 10 negatives of approximately equal merit. Nobody appears to be other than perfectly normal in this assembly. Two flashmachines, placed side by side with about 4 grains each, Victor Normal powder were used. Lens at f6. My Number 3 illustration is an example of what may be done with one flashmachine with but a two-grain charge of powder, with the aid of a mirror close to camera used as a reflector. Lens also at f6. Panchromatic film, without screen. This is one of 24 negatives exposed on this occasion, of various sittings, ten of which were ordered from.

But this is commonplace, and to be of that service as I should like to be, I feel I must get into the details of some of the more recent attractions available in the Flashlight field.

I have said that Noise is no longer a serious factor. It is not a factor at all when the photographer has modern flashlight equipment and realizes how little powder is ample for the making of fully-timed negatives, and the degree of silencing that has been put in modern powders. Every now and then I have to inquire of others if they saw the light

when I happen to have been very actively engaged in entertaining a young sitter—and probably making some noise myself along with it—and when I know I have put my fingers in the bulb.

And whilst I have a flashbag of my own devising, one that I had on the market a number of years ago, what with these uniform two-grain charges of a powder that I sometimes fail to know have been fired, and the inconsequential smoke from them, I believe I could readily dispense with it for smoke-holding purposes. As to the extra trouble of loading for each exposure, this is also behind me. I take this trouble in advance of the sitting by loading a twelve-shot string of pans with a capacity of two grains each. Each succeeding charge is brought forward into position in a jiffy and the time of making the twelve exposures will be actually less than with either daylight or any other illuminant, because of being able to grasp opportunities when the sitter may be in gentle action which the operator would not think of trying to secure except when using the flash.

The formula I would offer the man contemplating the trial of the Flashlight—I have in mind the man who has held some prejudice or misconceived notions about it—is to begin with the Victor Soft powder, using this either as he finds it or with the addition of one part of Normal to each three parts of Soft. Either of these is too slow for use in portraiture except when used in conjunction with an instantaneous shutter.—I use the Packard T. & I. in the  $3\frac{1}{2}$ " size.—Use either of these powders for your grownups, in two-grain charges carefully piled. The ignition must be from the jump spark, and the ignition switch placed conveniently out of sight of sitter on the rear of the camera, with the cover removed. Use about 10 feet of good rubber tubing from bulb (large) to branch T, let the angled passage of air through T go to shutter through a two-foot length, and let the "through" or straight-air passage go to switch with a 2" or 3" length. Interpose an ordinary sized photo bulb on the shutter branch to slightly retard shutter action. This action is decidedly quicker than can possibly be made with a "bulb" exposure, yet it is slow enough to allow the major part of the slow flashlight to register without danger of registering any influence the flash may have on the sitter. The gap between the ignition points of the switch which should be inspected at the beginning of every sitting (for which purpose the cover is left off) should be the tiniest possible. Down to about  $1/64$ ". In this way it is quite possible to start the ignition without the leaves of the shutter having commenced to open. The flash, getting this wee start, the shutter snapping through on Instantaneous and closing before the slow flash—practically noiseless and smokeless but of the highest possible actinic power—has had time to finish and before the sitter can either voluntarily or involuntarily move from any influence of the flash. Of the hundreds of negatives I made, under similar conditions, of delegates at the Chicago Convention of 1926, there was not a single case of closed eyes attributable to the flash, although on that occasion one skeptic



## CAMERA CRAFT

warned me that on my first negative he was going to keep his eyes open but on the second the moment he saw the beginning of the flash he'd close them. He may have done this but the two good negatives he later saw did not prove that he did.

For the babies and children, full of pep and ginger and sometimes the old Scratch himself, I advise the elimination of the retarding bulb on the shutter air line and a mixture of two parts of Soft to one of Normal. In this instance, you have pepped up the powder, also the shutter, and unless one has a sitter full of springs and elastic, this will meet all ordinary requirements, affording an infinitely higher percentage of good-action-fleeting-expression negatives, fully diffused, than is possible with any other illuminant. Economical in the extreme, the cost of illumination for one dozen exposures being approximately but 6c, inclusive of the constant pre-exposure illumination.

(To be continued in the March issue)

⌘ ⌘ ⌘

### THE MUSIC OF THE SEA

James Courtney Challiss

*From my casement in the morning, long before the night is gone,  
O'er the opalescent waters, like a prelude of the dawn,  
Comes a soft, subduing movement, such a soul-appealing air  
That it falls upon the conscience with the solace of a prayer.*

*When the thunder-guns are booming and the lightning cuts the sky,  
I can hear the martial music of an army swinging by!  
Hear a million waves in action, fighting, foaming in the fray,  
Till I feel the pulsing passion of a mighty polonaise!*

*When the tide with purple fingers through the twilight feels its way,  
In among the granite breakers, growing dark upon the bay,  
I can hear the rhythmic music of the sea's eternal soul  
As a nocturn low and plaintive breaks upon the silver shoal.*

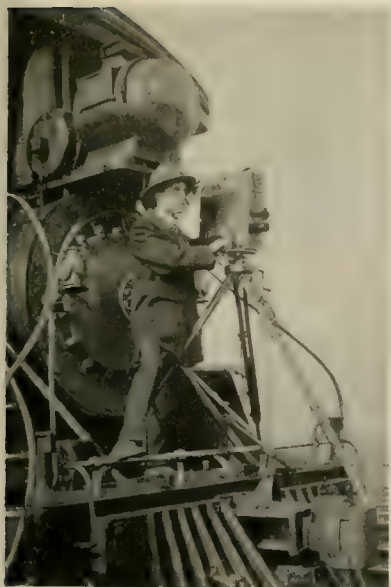


# Camera Work of Moving Pictures For the Amateur and Professional

By Ernest M. Reynolds

Illustrated by the Author

(Continued from the January issue)



*Editor's Foreword—The author of this series states as prefatory to his text that it has been his wish to abstain as much as possible from the set forms and didactic manner of a text-book. How ably he has succeeded will immediately appear to the reader. Mr. Reynolds commands our highest respect for his skill in making technical, constructive and instructive matter as interesting as a story.*

Suddenly a man carrying a complicated looking instrument appears, sets down his burden and closely studies the scene. Our guide informs us this is the cameraman and the instrument is the all-important camera. Immediately our attention is called to the director who we see is conferring with the cameraman, as they study the big scene. Orders are given to the chief electrician and we are suddenly surrounded with a dazzling flare of lights. Lights here, there and everywhere; we cannot look without the greatest of difficulty. We are now face to face with one of the greatest hardships experienced by the actors and working crew. Constant exposure to such powerful lights, often causes the eyes to be "burned" an extremely painful, and somewhat serious thing. The next time you see what you term a beautiful close-up of such an actress and comment on her big eyes, showing so clear and wonderful, just give her a thought of how those same handsome eyes felt the next day. The camera has now been placed upon a platform about eight foot square and ten foot high. They are making ready to take the long shots of the scene. The director and camera-man, inseparable twins, are on the platform carefully taking in the whole scene, studying it from the angle of the camera. From now on the director controls the action of the scene by speaking through a megaphone. The action or movement

## CAMERA CRAFT



of the players is rehearsed a number of times, changes being made here and there, until we hear the director say, "Alright, we'll take it this time." Squeals and roars of the big arcs are now heard and white shafts of light rivalling the sun itself, are added to the already brilliant scene. A pause follows which seems like an age, everyone waiting. "Camera," bawls the director. The whir of the camera, together with the measured movements of the players, tells us that the scene is in the making. After photographing the scene a half dozen times or more, the lights are turned off and the position of the camera is changed. Within a few minutes the scene is taken again, this time with still another change in action. The director is playing safe by taking these different shots and actions as they may look totally different when projected upon the screen. Finally after dozens of scenes are taken, all aimed at the set in general or portions of it, the people are dismissed with orders to examine their make-up, as closer views will follow immediately.

Our guide hails this as a golden opportunity to show us the method used in making up for motion picture work. We are told that opinions differ widely as to the most satisfactory method of make-up. One star may use a specially compounded powder or grease paint, which is slightly different in color than any other in common use. The following is a general description of the method of make-up:

First give the face a cold cream bath, rubbing the skin practically dry with a towel. This makes the application of grease paint easier and smoother. The grease paint is applied in streaks then worked even by gentle touches of the finger tips. This covering of make-up should be evenly distributed over the face and neck, making a new skin, even to the painting out of the lips. This is the foundation upon which the make-up is built. Next the eyebrows and lashes should be emphasized, taking care not to over shade them. A specially prepared pencil is used for this. Most people use Mascara on the lashes. A blending grey fading from the roots of the eyelashes, to the eyebrows is used on the lids of the eyes. This is accomplished by using the black pencil lightly



## CAMERA CRAFT



and carefully blending the application with the finger tips. As to bringing out the lines of the mouth, natural or otherwise, numerous methods are employed. The most satisfying results are obtained by applying cold cream to a soft towel, then placing this to the lips, erasing the grease paint covering in a manner which will give the desired curves and mouth lines, letting the natural color show. This is especially effective when the natural mouth lines are to be preserved. Rouge may be used to entirely change the lip expression. The powder for motion picture make-up is made in a great variety of colors. These different colors and shades are referred to by number. Powder is the final application, over the entire face and neck. This is a professional explanation of a subject that is rarely seen in print. When the movie aspirant first dabbles with make-up, the results are usually heart breaking. However, experience is after all the best teacher.

Probably the most interesting process is to watch the transformation of a young actor into a tottering old man with a face resembling that of Rip Van Winkle. It is all done by the art of make-up, probably the most essential element in the entire theatrical profession.

The next important occurrence is the photographing of the close-ups, which are to match into the long shots previously taken. The director now dispenses with his megaphone, and his attitude is decidedly more friendly and personal. It is in these close-ups and semi-close-ups that the most important bits of acting is contained. Here is where it is most essential that the director camera man and actors be in perfect harmony, each thinking of the other. It is more difficult for the player to work in close-ups as the space in which he can move is very limited, and this must always be uppermost in his mind. Once the player steps out of range of the camera, the scene is ruined. We watch the director work his people into the necessary action, whether it is love, hatred or comedy; all the time keeping that perfect harmony with everyone which is so

essential to the smooth working of a big studio. Dozens upon dozens of scenes are made. The heat generated by the big lights becomes next to unbearable, but still they work on. Night is no different than day, as it is always the same constant glare of lights in a picture studio. Work is finally finished for the day and after meeting the director, cameraman and a number of the principals of the cast, we are forced to admit, they are a pretty nice sort of folks after all. At least we can not say we saw anything to make us think otherwise. Outside the studio and in their home lives it is up to them to live as they see fit, after which I leave it to you, is it not like any other business.

(To be continued in the March issue)

8 8 8

## Law For the Photographer

By M. L. Hayward

### WHEN THE DEPOSITOR BORROWS

A Massachusetts trust company was in the hands of the Bank Commissioner, a certain photographer had a credit balance of over \$7,000 in the Commercial Department, and had borrowed \$6,000 from the Savings Department.

"I'll just offset one against the other, so I can't lose very much," the photographer proposed.

"As I see it the difficulty from your standpoint is that our state law says that all investments and loans in the savings department of the trust company shall be applied solely to the payment of the deposits in that department and shall not be applied to the obligations of the trust company until the savings depositors have been paid fully. Of course, it's a matter of law that the courts will have to decide," the Commissioner retorted, and the Massachusetts Supreme Court ruled that the photographer could not offset a deposit against a debt under these circumstances, as, to do so, would be using the funds of the savings depositors for the benefit of the commercial depositors.

"It is plain a setoff of a debt of the commercial department to a depositor therein in extinguishment of a debt owed by the depositor to the savings department necessarily would to that extent deplete the investment of the savings deposits, to the loss of the depositors in the savings department and to the gain of the general creditors," said the Massachusetts Court.

"Yes, but I didn't know that the loan came from the savings funds," the photographer contended, but the court also overruled this contention in the following words:

"We think it quite immaterial that a borrower from the trust company does not have actual knowledge that the money is loaned from the funds of the savings department."

# Lecture Notes on Photography

By Professor Edwin A. Sperry

Pei Yang University, Tientsin, China

Illustrated by the Author

(Continued from the January issue)

Only those metallic oxides which are used in the manufacture of colorless glass are mentioned as they are the only ones used in making optical lenses.

It will be noticed that the atomic weights of the various metallic oxides have a very wide range, from 24 to 207, and by the employment of these different oxides, glasses of widely different specific gravity or density are obtained. In this manner, refractive index is not only modified very greatly, due to varying density, but other optical properties are also greatly influenced, especially that of DISPERSION and RETARDATION. For example, the density can be varied from 2.55 to as high as 5.5 with a refractive index varying from 1.5 to 1.75 or, in some cases even to 1.8. The nature of the glass also influences dispersion and retardation, while it might be safe to assume that you all are familiar with optical terms as taught in your course in Physics, it might be well at this point, to define the three terms with which we are dealing.

**THE REFRACTIVE INDEX** of any medium determined by dividing the Sine of the angle made by the ray of light in air incident upon the surface of any medium and the line perpendicular to that surface, by the sine of the angle made by the same ray to this perpendicular after it has passed into this medium.

The **DISPERSIVE** power is the measure of difference between the refraction of two selected rays compared with that of some definite ray as, for example, the "D" or sodium ray.

**RETARDATION** is the decreased speed of a ray of light in passing through a dense medium from that of the speed of passing through a rarer medium or one offering less resistance.

While it might appear that these three properties are closely correlative it has been found that they do not act uniformly or harmoniously under different conditions. This is well illustrated in the instance which was given above in the sketch of the development of lenses where it was stated that in 1881 a glass was discovered which gave a high refractive index with low dispersive powers. It might be assumed that a high density had given the high refractive index and as the variation of the dispersion is directly dependent on variation of density under ordinary conditions, it would be expected naturally, to follow in this case. It seems to be contrary to that fact so it is quite evident that the laws governing the two optical properties are not the same. This is only one of



## CAMERA CRAFT

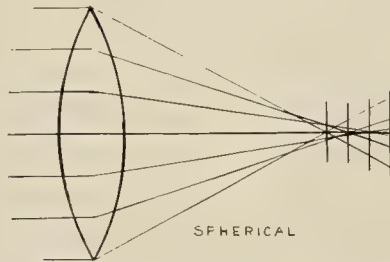
the complications which enter into the problem of the perfect correction of the various imperfections or aberrations of lenses.

There are five **ABERRATIONS** which have to be met or corrected, all of which are optical while others are mechanical. These are as follows:

1. Spherical Aberration
2. Chromatic Aberration
3. Curvature of the Field
4. Distortion
5. Astigmatism

which will be taken up in the order in which they are named, inasmuch as this was the order in which they were corrected.

### *SPHERICAL ABERRATION*



When rays of light which are practically parallel, strike on the surface of simple double convex lens with spherical surfaces those passing through it near the center will be concentrated at a point at a fixed distance from the lens on the opposite side. Those rays which enter and pass through it at the outer edge of the lens will naturally be more sharply refracted as the surfaces have greater angles than that necessary to concentrate the marginal rays at the same point at which those near the center will be concentrated. This error increases progressively as we pass from the center to the edge of the lens and it can be seen that there can be no point at which a sharp image can be projected onto the screen or plate. This defect can be corrected by modifying the curvature of the surface so as to follow a gradually flatter curve from the center to the edge but this would require very delicate and differential grinding which would add very materially to the cost.

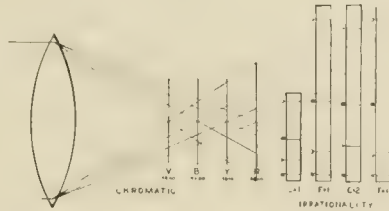
It is for this reason that a single lens of the double convex form is seldom if ever, used in the camera. It can be corrected partially by the use of a simple convex meniscus lens, having the front surface a very flat concave and the back surface a somewhat stronger convex surface. Where single lenses are used in the hand camera, it is generally of this type.

This correction can also be made, and this is the general method used, by the use of a negative meniscus lens used in combination with

## CAMERA CRAFT

a double convex of considerably lower density than that of the negative element. As the two elements have different densities, they can be so proportioned that, with the varying ratios of thicknesses at the various distances from the axial line, the refraction or retardation can be properly harmonized. This correction, however, is not often used for this purpose alone but is usually applied for the correction of other errors at the same time with the principal error which is corrected with SPHERICAL ABERRATION by this method, viz:

### CHROMATIC ABERRATION



Chromatic aberration is the result of the tendency on the part of any simple lens to decompose the rays of light into the prismatic spectrum. In order to more clearly understand the causes and the methods of correction of this defect it will be necessary to refer briefly to some of the laws of physics regarding the action of light. In this we will assume that we are dealing with a perfectly white light.

A perfectly white light is composed of a large number of rays which have widely varying wave lengths generating widely different colors according to their length. It is not necessary to discuss the wave theory of light but it is only necessary to say that if a beam of white light is passed through a prism having an angle between the sides through which the beam passes, those rays which have the shorter wavelength will be diverted or refracted to a considerably greater degree than those having the longer wave length.

In the VIOLET ray, "L" the symbol for the Angstrom Unit, (A. U.) equals 3800, the BLUE, which comes next equals 4800, the YELLOW which follows, is 5800 and the RED which is the last equals 6800. These numbers are approximate but will serve to illustrate the principles we wish to bring out.

The length of the spectrum generated, or the length between the violet and the red rays, known as the DISPERSION, is increased both by the greater angle between the two surfaces of the prism as well as by the greater density of the glass used, in ordinary cases. We say "in ordinary cases" by which is meant in glasses made prior to 1880 the simpler compounds were used in which higher density gave uniformly higher refractivity and dispersivity. As has been stated before, Prof. Abbe discovered that by the use of barium salts the glass produced had

a high refractivity and a low dispersion. This type of glass has been termed ANOMALOUS inasmuch as it so entirely disobeyed the rule which was accepted; that density affected both refraction and dispersion similarly.

Glasses are classified into two general types: CROWN and FLINT types. The crown glass is made up with bases of very low specific gravity giving low density while Flint glass is made up with bases of higher specific gravity, such as lead, which give high density. The nature of the bases and the manner of compounding with the acid oxides has been described above.

In using prisms for the decomposition of light, it has been found that Flint glass can be made which will have a dispersion twice that of crown glass. If a prism having a given angle be made of crown glass and a ray of light be passed through it, it will give a certain or given dispersion or, in other words, it will have a given length. If a prism having half the angle be made of flint glass and placed alongside of the first in a reversed position so that the ray will, after passing through the crown glass prism, pass through the flint glass prism the ray will become recomposed THEORETICALLY and appear as a ray of white light as before. It will be noted that we say "theoretically recomposed. This is because there is an error which comes in at this point called IRRATIONALITY of the spectrum which will be taken up a little later.

The essential form of the lens is that in which the surfaces are at an angle with each other so will necessarily have the "prism" effect or that by which the ray of light is decomposed. The result of this is that, as in the case of the prism, the different colored rays will be differently refracted, the blue much more sharply than the red with the yellow lying intermediately.

One of the complications of this error is that it is not readily seen by the eye. As has been mentioned, the "visibility" or light value of the various colored rays is not the same to the natural eye as to the sensitive plate. That is to say, the rays which more readily affect the eye are not those which are the most energetic in the reactions which take place in the film of the sensitive plate of ordinary kinds. The term "ordinary" is used here to designate those plates which are in common use and in which the sensitized film contains the simple salts of silver, that is, the Bromides, Iodides and the Chlorides, and is especially sensitive to the blue and violet rays. There are ways in which these films may be made sensitive to other colors but that will be discussed under its special heading. Such plates are called "SPECIAL" plates.

Another complication in the correction of this error is that inasmuch as the various colored images are differently refracted, they lie at different planes which necessarily gives them difference in size.

(To be continued in the March issue)



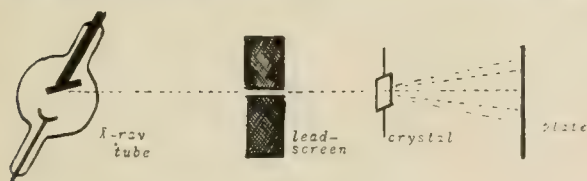
# Photography in Science. III. Exploring the Microcosmos

By Professor Ingo W. D. Hackh

College of Physicians and Surgeons of San Francisco

(Continued from the January issue)

Comparing the structure of the universe with the world of atoms and molecules seems a large step, yet there is much in common. In a later article on the marvels of the spectrograph we shall find that the modern astronomer must be a physical chemist, and the progressive chemist ought to study astrophysics, for there are many close relations between the stars and atoms. For the moment we shall confine our attention to the photographic methods which show us the existence of molecules and atoms and indicate to us their special arrangement and distribution in matter.



## EXPLORING THE MICROCOSMOS

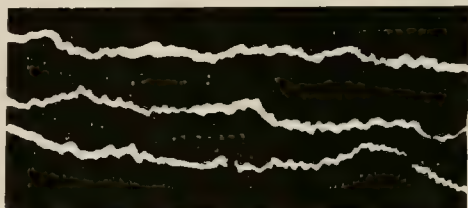
*This is not a solar system but the diffraction pattern produced when a beam of x-rays passes through a crystal, in this case aluminum oxide. The large central spot is produced by the non-diffracted x-rays, while the symmetrically placed smaller spots are due to the diffraction of the extremely short waves of the x-rays, as the series of planes formed by the atoms in the crystal which acts like a grating. From a study of the distribution and intensity of the spots it is possible to calculate the position of the atoms in the crystal and construct a space-lattice or model showing the special arrangement of the atoms.*

## CAMERA CRAFT

### BROWNIAN MOVEMENT

If a beam of sun-light falls into a darkened room we observe the dancing dust-particles,—even should the air be quiet, these erratic motions persist. If we observe closer we find that the dust particles are made visible by the reflected sunlight, most convenient is the observation when we are at right angles to the beam of light. The same principle is utilized in the ultramicroscope which is simply an ordinary microscope in which the objects under observation are illuminated at right angles, instead of being viewed in the direction of the light.

Atomized oil droplets suspended in air, or extremely small particles suspended in water appear, thus, as minute stars or points of light when viewed in the microscope under right-angle illumination. But these particles are not at rest, they are constantly dancing about as if they were receiving blows from many directions. If the drops are smaller and the gas more dense, the movements, called Brownian movement, increase in speed and length, and it has been proven beyond doubt that they are the result of the invisible molecules of the gas or liquid which are in rapid motion and collide with the droplets or particles,—just as an aviator flying over an athletic field may observe the erratic motions of a large push-ball, and therefrom conclude as to the presence of the players hitting that push-ball, but their bodies are too small to be seen from his altitude.



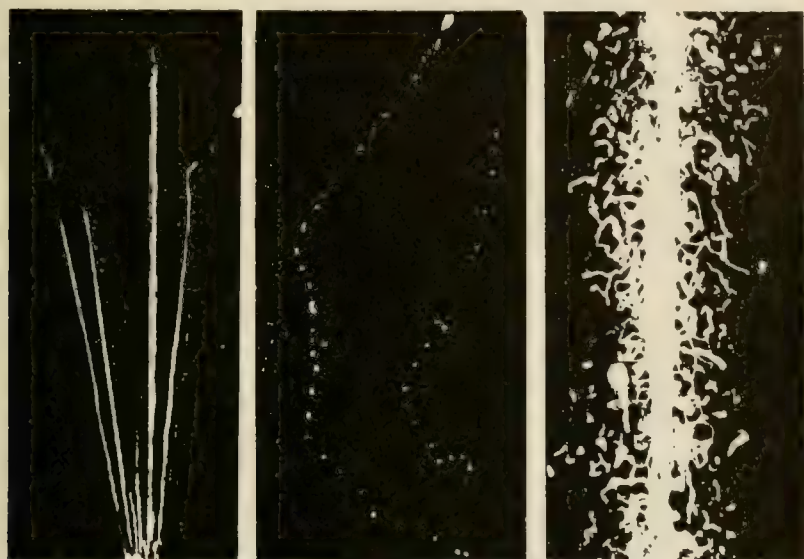
By passing a photographic film or plate across the line of sight, we obtain an irregular line indicating the erratic movement of the point of light. With strong side-illumination a moving picture of Brownian movement can be made.

### TRACKS OF ATOMS AND ELECTRONS

The photographic plate enables us also to record indirectly the path which atoms and electrons describe. Naturally they are far too small for direct observation, but just as the effects of molecules could be observed in Brownian movement, so we may photograph the effects produced by electrically charged atoms (ions) and the negative particles (electrons). If air saturated with moisture is suddenly expanded it cools and the moisture tends to condense on any particles which are present, hence a fog is formed. It has been shown that the formation of the fog is due to the dust-particles which act as centers of condensation. Several years ago C. T. R. Wilson showed that in perfectly dust-free air an

## CAMERA CRAFT

electrically charged atom (ion) or an electron may likewise form a center for the condensation of the water which then forms a localized cloud or fog. The latter can be photographed when strongly illuminated at right angles to the microscope and camera.



*A-Rays*

*B-Rays*

*X-Rays*

The X-rays of radium are charged helium nuclei or positive ions shot off at high speed from certain radio-active materials. If they are brought into a suitable chamber containing dust-free and moist air, each individual X-particle will leave a trail along which the moisture condenses. Such a trail of fog is nearly always a straight line. Once in a while the X-particle hits a molecule of the gas and this produces the sudden change in the direction of the alpha-particle.

The B-rays are electrons traveling at great speed,—they are given off not only by some radioactive materials, but also are produced in a vacuum tube (cathode rays). If they are passed through a similar expansion chamber they produce a much smaller number of drops and a tortuous path. This is due to their smaller size for they scatter by the collision with the atoms of matter in their path.

The X-rays are radiations of an extremely short wave-length which have the power to ionize gases, that is to knock off a negative electron from an atom and leave it thereby positively charged (an ion). If a pencil of X-rays passes through an expansion chamber, the atoms of air and moisture in its path are ionized and the electrons are scattered in all directions, causing an extremely tangled and twisted cloud of fog, which likewise can be photographed at right angles to the X-rays and the illumination.



## CRYSTAL STRUCTURE

Everyone knows that a crystal has a definite regular shape which can be artificially grown to large size. such a regular form with fixed axes and angles, peculiar to the crystallizing substance, and always the same for each substance, indicates that the molecules or atoms which make up the substance, arrange themselves in an orderly and systematic fashion, whenever the substance crystallizes. Can we photograph this internal arrangement of the crystal?

Indirectly this is possible if we use the shortest light-waves, namely X-rays, and let them fall upon a crystal. One part of the X-rays will pass through the crystal unhindered and forms the central spot on the photograph. Another part of the X-rays is deviated from its straight path and forms a series of smaller spots, some strong, some faint, situated in an orderly fashion around the central spot. Such a photograph is called a Laue diagram, as the German physicist Laue was the first to obtain and explain one. The conclusion is that the regular rows of atoms in the crystal act like a grating and diffract the short-waved X-rays. The length of the X-rays being known and the distance from plate to crystal being accurately measured, it becomes possible to calculate the distance between the atoms in the crystal, and to determine the angle at which they are located to each other. Thus from the two-dimensional photograph it is possible to construct a three-dimensional "space lattice" or crystal model which illustrates the position and distribution of the atoms within the crystal.

(To be continued in the March issue)

## Some New Things on the Market

By Burleigh Brooks

"I can make as good a picture with a cheap box camera as I can with a high-priced one."

How many times we have heard this emphatic boast, and how many times we have been expected to praise the speaker's product. Of course the critical and experienced photographer, either amateur or professional knows the kind of "snap" that is exhibited as the "just as good" picture—flat, lacking in roundness, modeling, perspective and detail; out of focus outside a limited central field; background blurred or distorted—but why go on? You know the kind.

There may be a carpenter who can build as fine a house with a sledge-hammer as he can with a whole kit of the tools of his trade. There may be a man who can repair a watch with a pile-driver; and there *may* be a photographer who can make as good a picture with a low-priced box camera as he can with a high-priced bellows-extension camera equipped with an optically perfect lens, and fortified with such accessories as may be required to meet exacting conditions. But if there is such a one—and we do not readily concede that there is—he is *rara avis*—one in a million.

## CAMERA CRAFT

The writer has no fault to find with the picture-maker who uses a low-priced camera, and who is pleased with the pictures he makes with it, if he is at the same time striving to make better and ever better pictures. That's the way that ninety-nine out of every hundred of us began. But the average user of the very low-priced camera loses quickly that feeling of self-satisfaction, with the beginning of appreciation of the intrinsic beauty and value of real pictures that will stand the acid test of critical examination. When the limits of the low-priced camera have been reached, one of two things happens: the user puts it away and changes to another hobby; or he obtains a better camera and continues to improve his pictures.

The very low-priced camera has its field of usefulness but it must be admitted that its limitations are sharply and closely drawn, and if the user takes his photography at all seriously, he quickly reaches the limits.

The ranks of amateur photographers have been swelled enormously within the last few years, due to no inconsiderable extent to the improvements that have been made in cameras and their accessories.

When radio was first put within reach of the average person possessed of a moderate degree of mechanical or technical skill, it was less advanced than it is today. The crystal set satisfied all but a few of the beginners. But radio has been improved—no use to relate its magic story here—and the former users of crystal sets have gone in for real radio delight with later, finer, more effective and of course more costly equipment. The difference in reception and range between the early crystal set and the latest multiple-tube set is comparable to the difference between the products of the inexpensive box camera and the up-to-date camera of better quality and slightly higher price.

This is the era of discovery and improvement. If you have not thought of it in that light, look about you for a moment—transmission of pictures by telephone and wireless; transoceanic wireless telephony: automobiles—and cameras and their accessories, among a thousand other things.

For the camera industry has not stood still to watch the parade go by. It has been marching right along, keeping pace with the other industries. Better cameras, better accessories, better pictures—more recruits to the ranks of the fans.

One of the most striking and useful of the new products in the field of photography is an instrument described as "The Thinnest Camera Made." This modern marvel of compactness is only one inch to one and one-quarter inches in thickness when closed, and weighs fourteen and eighteen ounces. It is equipped with many ultra-modern devices, including the popular wire view-finder. It is made with single and double-extension bellows, and represents the latest advance in convenient camera construction. It comes in two sizes:  $2\frac{1}{4} \times 3\frac{1}{4}$  inches and  $9 \times 12$  centimeters ( $3\frac{1}{4} \times 4\frac{1}{4}$  inches), and is fitted with plate holders and film pack adapter.

It may be conveniently and inconspicuously carried in a coat pocket, or attached to the belt. It is so simple in its principles and construction, so excellent in its materials and workmanship, that it will not easily get out of order, and will endure for years. The lens equipment is the Jos. Schneider & Co. or Zeiss Tessar f:4.5 in Compur shutter, or at a slight additional cost the smaller size may carry a Schneider Tele-Xenar f:5.5 telephoto lens; or the 9x12 centimeter may be equipped with a 9½ inch Schneider telephoto lens in a leather carrying case.

Telephoto lenses are no longer considered a bugaboo, and many amateurs are finding great delight in their first experiences with these valuable accessories. New fields of tremendous interest are being opened up to the amateur by this lens. Formerly it was thought that the Telephoto lens was extremely difficult to use—that its use made necessary elaborate changes on the camera—that they were intricate and complicated and enormously expensive.

But photography has been advancing with the rest of the parade. Telephoto lenses now are produced in such form that it is no more difficult to figure correct exposure than it is to figure it with a regular lens. They are compact, easily fitted and amazingly simple to use. The diaphragm system has been worked out so thoroughly and so successfully that the Telephoto lens now offers no serious problem to the amateur who has had even a little experience.

They are so reasonable in price that at a comparatively trifling additional expense one may be obtained that is suitable for use on almost any camera. They are fitted for use as a replacement lens—simply unscrew the regular lens and screw the Telephoto lens on the barrel in its place. They may be successfully used on cameras of almost every kind.

There is a growing demand among amateur as well as among professional photographers for a thoroughly dependable and reliable sky and cloud filter. In order to meet all the requirements of the careful and artistic workman, the filter must be so simple to operate, so unerring in its results with intelligent use, that the least experienced amateur will be able to produce the results desired.

A device that meets all these rather exacting requirements is the Graduated Sky-Filter, now available in the American market. Many efforts have been made to produce a sky-filter that would make possible the photographing of clouds, producing all of the true tone grades or values. A large number of so-called "sky-filters" were simply two pieces of glass, not always optically true, between which was cemented a piece of tinted gelatin.

This combination did not prove satisfactory and it remained for the makers of this filter to devise an entirely new principle of design and construction. By the application of this new principle all the old defects are eliminated and a scientifically accurate, dependable and optically perfect filter is produced whose work may be measured in advance and confidently relied upon. None but the finest optical glass is used and it



## CAMERA CRAFT

contains no gelatin, cement, or other substance that can retard light. In the making of this sky-filter, a piece of greenish-yellow glass which excludes blue and violet light-rays, is fused to a piece of pure white glass of equal thickness. The composite block is ground at an angle which leaves the filter clear white at one end and yellow-green at the other. One color merges evenly and gradually into the other without a line of demarcation. The glass is then brought to a high polish on all its surfaces, and is mounted in a holder of simple and efficient construction. It cannot get out of order even with rough usage. The holder may be attached to a lens barrel of any diameter up to the width of the filter, and may be shifted up or down to get the desired degree of correction.

These filters fulfill five distinct offices for the photographer. They correct color giving their true equivalents in tones of gray to black; they equalize exposure between sky and dark foreground; they equalize exposure between very dark on one side and very light on the other—as on sea and cliff, snow and forest; they give true tone values in winter snow scenes; they serve when depressed to completely cover the lens, as an ordinary four-time filter.

Another device recently introduced to the American amateur and professional photographer is an automatic tripod which meets all the demands for a light, sturdy, rigid support for the camera. This tripod is formed of U-shaped bars of Duraluminum, each section fitting closely into the next section above. It may be fully opened in three seconds by pressing a button, ready set up for use. Tests of its strength and rigidity have shown that it will support 100 pounds with safety. It is simple in construction, practically indestructible, and weighs only a little more than one pound.

These are a few of the advances that have been made recently for the benefit of the amateur and the professional photographer—for all of those who have graduated from, or are about to graduate from—the “just as good” class.

8 8 8

### MORNING ON THE RIVER

Bert Leach

*A turbid stream of molten glass  
Rolls-on beneath a cloud of swallows,  
Laughs fiery peals of light from shallows  
And chants o'er deeps a solemn mass.*

*As gods to clear Olympian springs  
Come laughing boys in their own whiteness  
To mingle with the river's brightness  
And echo its gay murmuring.*

*Like heart-born tears of love-lorn maids  
Drips slow the night dew from the willows  
Into the little mocking billows  
That rest a moment in the shades.*

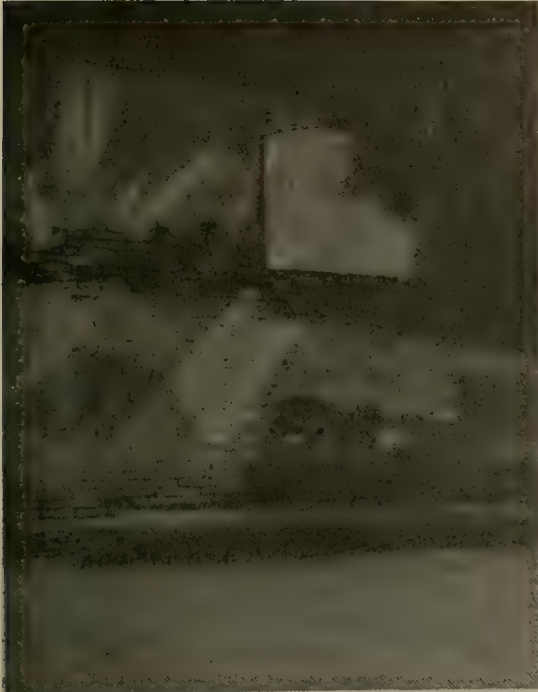


*First Award*

*Frank J. Calabria*

FEBRUARY ADVANCED COMPETITION

# CAMERA CRAFT



Second

1  
9  
2  
8



ADVANCED  
FEBRUARY



Fourth



Fifth

SECOND: *Dr. Max Thorek*  
FOURTH: *Fr. Pfennigbauer*

THIRD: *Aage Remfeldt*  
FIFTH: *Dr J. B. Ochsner*

## CONTRIBUTORS FOR FEBRUARY

Anton Arvella  
Dr. Ebner Ashby  
Hans Bacher  
Mrs. L. S. Bosford  
E. J. Brown  
Frank J. Calabria  
Henry Carash  
E. L. Chatton  
O. Detweiler  
Henry Doane  
Oscar Elbrecht  
Miss J. Eversen

Joseph Finston  
Allen Fraser  
Mrs. V. Geraty  
H. Gulick  
Dr. L. Housman  
Frank Inman  
H. S. Kaito  
Dr. K. Koike  
Otomatsu I. Kuta  
M. Leffenwell  
J. Esterbrook Leniman  
K. Nagayata

T. Noguchi  
M. A. Obremski  
Dr. J. B. Ochsner  
Franz Pfennigbauer  
Aage Remfeldt  
M. M. Shimizu  
Dr. Max Thorek  
T. K. Tsukane  
H. Tyzack  
A. Wallace  
Thomas Wesser



CAMERA CRAFT



*First Award*

*J. C. Youenes*

FEBRUARY AMATEUR COMPETITION

# CAMERA CRAFT



Second



Third

## AMATEUR FEBRUARY



Fourth

1928



Fifth

SECOND: C. E. Lamphere

FOURTH: A. Blackie

THIRD: Alex. J. Krupy

FIFTH: B. J. Westinghouse

### CONTRIBUTORS FOR FEBRUARY

Peter Anderson  
Arf Arenson  
Fred B. Auer  
Mrs. E. Beston  
A. Blackie  
G. B. Blaisdell  
Dr. C. E. Bousfield  
A. W. Clark  
H. Christoffers  
Charles J. Dutton  
Miss Joan Edeson  
Dr. P. T. Everson

Hans Franz  
Mrs. G. O. Gleason  
H. H. Hall  
M. Hammett  
P. Y. Homma  
Miss K. Iwani  
Harold Jennings  
Anderson Jones  
Mrs. Minnie Joust  
Alex J. Krupy  
C. E. Lamphere  
Mrs. F. Loudon

A. S. Macfarlane  
Miss Annie M. McKinley  
Paul Neuman  
Arthur Nottinger  
Miss Katherine Nunan  
William R. Ordway  
John Ponniah  
R. E. Price  
Dr. L. Quinlan  
Mrs. Freda Rohrbach  
A. Frederic Rowan

J. A. Scocini  
K. Shimidzu  
Miss Edith Study  
Frank A. Thallmann  
Paul Treblin  
J. Turner  
William C. Vestal  
T. M. Waumsley  
B. J. Westinghouse  
Robert Woolverton  
J. C. Youenes  
Henry Zander



### Photography in the College Curriculum

The astronomer needs photography almost as he needs his telescope. Modern methods of discovery, placing, knowing universes depends on the camera.

The naturalist no longer trusts to his eye and hand in portraying animals, birds, fishes, flora and fauna. He wants photographs. He needs them.

The geologist finds his branch of science demands accurate data, not only in words and figures, but in images. Again the camera is his last resort.

Now the scientist is rarely a good photographer and he therefore calls upon the photographic skill of a professional who is not a scientist. So two able men work, more or less, at cross purposes. One knows how to make pictures but not scientific images, the other knows what the pictures should be but is ignorant of the methods of producing them.

Since photography is so intimately connected and interwoven with other sciences it might be considered a part of all of them. Reason would suggest that it be made a compulsory unit in every scientific department of universities and that the mental soil be prepared in the high schools.

With a sort of prescience or instinct the schools faintly encourage camera clubs but the meetings and the work of these are desultory. In fact the motivating influence that maintains them is disciplinary and entertaining. The teachers feel that a healthy and improving amusement will better their pupils for their purpose—make them more easily managed and more willing to study.

That is not enough. Only the dignity of an accepted part of the curriculum, only the compulsory qualification as practical photographic workers will serve the purpose.

It is to be hoped that every university will create a chair in photography, equip a photographic studio, dark room, laboratory, and insist that this department be an accredited unit in the obtention of a degree in any of the absolute sciences.

### From Heart to Heart

Miss Ida M. Reed is the owner and general manager of Camera Craft, however unworthy I be, the honor of being its editor is mine. We both have our respective problems and we both try to solve them as best we know how and can. In this endeavor we are mightily strengthened by the real friendship of perhaps ninety-nine per cent of our readers. The holidays are past and we have had the time to realize and enjoy the hundreds of Christmas and New Year's greetings sent us. Most of them not mere formal cards but with personal messages indited by hand. Touched by them all we were especially affected by those from our contemporary magazine owners and editors. Abel, Beardsley and Chambers all remembered us and Fraprie was so good as to send each of us a beautiful photograph and his card with greetings in his own hand. To each and all of you Miss Reed and I send our thanks and wishes that the coming year may bring you health, success, and as much pleasure as you have helped to create for us.

### All Hail the Worker

John Word Caldwell believes in an American National Photographic Society and puts action back of his belief. His letters to his influential friends will help to speed the cause. A busy man, an aggressive man, a courageous man. What have you done to qualify likewise?





## Motion Pictures

(Continued from October issue)

Robert Paul had plenty of trouble in his workshop, but in France the two Lumiere Brothers, August and Louis, were having an even harder time of it. The Edison Kinetoscope had made its appearance late in 1893 and these ardent scientists realized the deficiencies and the possibilities of the the new invention, no longer so new, a deficiency that consisted mainly in that only one person at a time could view the pictures in motion, and the possibility of having thousands see them at once. The Lumieres, therefore, devoted themselves to inventing a camera for taking and a machine for projecting. Their first camera was ingenious but should look very crude to us now. The perforations were farther apart than we are used to seeing them and the film was moved ahead, frame by frame, by hooked fingers instead of sprockets. Edison's perforations were placed four to the picture, the Lumieres' one to each exposure. The width remained as Edison made it. Talbot praises the longer interval and says that the closeness of the sprocket holes weakens the film. Apparently he has not taken into consideration the increased lack of accuracy in registration and synchronization caused by the wider spacing due to expansion and shrinkage of the film.

It is not within the knowledge of this writer to affirm or deny the same critic's assertion that the French films were far superior to those made in America. It might be so but is none the less remarkable. Be that as it may, the Lumieres found that the pirated machine and films of Paul had flooded their market and since their machine could not accommodate the then standard perforations, and their films could not be used in the widely-owned Paul machines, they sacrificed that superiority of which Mr. Talbot speaks, and adopted the Edison form.

The Lumiere projector was peculiarly interesting in that the glass condensers were replaced by a spherical flask filled with distilled water. This was to avoid the dangers of ignition of the inflammable negative or rather positive material. Celluloid, in those days, was not only inflammable but sometimes explosive. Many a lady's comb and brush blew up by the light of her dressing-room candle, and, looking back, one wonders if celluloid sprang from the byproducts of high explosives or the reverse.

This water-bottle condenser, not being equipped with radiators, often boiled merrily after a half-hour run, and, to avert the spurting and boiling over of the water, a piece of coke was suspended near the top level of the water. Sometimes the flask overheated and burst and, so much for its effectiveness as a safety device, the water wet the film and put out the light so the possibility of the effect and the cause were both averted by the same accident. Lest the reader immediately give our Frenchmen of genius all the credit, be it known Edison also used a water condenser, but added to its virtues by using a solution of alum as a heat absorbent. Peculiar, how these Yankee inventors always butted in on other people's inventions before the other people had a chance to invent them.

This must be conceded, wholeheartedly: the Lumiere apparatus was well thought out and exquisitely created. The workmanship was such as to be worthy of the highest commendation. Also, it must be known to the credit of these great brothers that the popularity of motion pictures in America is due to their machines and that popularity was increased later by the productions of other Frenchmen. Paul had penetrated into France and was there displaced by the native invention. Into America, however, the British gentleman

never entered, through sentiment, discretion, or conscience.

It is particularly interesting to read the national points of view as to where honor should go. Talbot says, naively, that Edison and the Lumiere brothers were entitled to recognition, but "It is the work of Robert Paul (of England, of course) which commands the greatest appreciation; (of Englishmen, again of course) he created the industry and set it firmly on its feet." The parentheses are mine and with an equal of courseness it is my privilege in writing these lines to pick a few laurels from the green bay tree and put them on such heads as did their cogitating under the American flag.

Somehow, the world goes on crediting Edison with the electric light, although arc lights shone, experimentally, in Italy and France before our inventor was born. Somehow, we credit Edison with motion pictures, though Paul and Lumiere worked out ideas along the same line. In a word, we are a practical people and do not care who planted the old apple tree; but we pay our money, take our apples, and are grateful to the man who brings the fruit to our door.

Unbiased judges will never permit themselves to ignore the splendid work done photographically by the old Biograph and Vitagraph, nor to pass by in silence the better plotwork of the Pathe, and for all our exploitation in the news and the scandal of the day of Hollywood and its millions of dollar productions, the discerning public will always give a grateful heart-throb to the British producer who is occasionally allowed to show the simple, sincere, truly artistic filming of a standard literary classic following the lines of the author and free from claptrap and hokum.

The Motion Picture Machine is now in the hands of the ubiquitous amateur and every family will some day have its Cine Camera and projector. The family influence is already being felt and a much-bruited campaign for economy is less than a realization and action on the part of the big producers to keep apace of the times. Sex appeal calls for sex-appealers and they come high in the Fleshpot Markets; sex appeal giving place to home and

family appeal, to literary and dramatic appeal, great authors and great actors are being demanded, and greatness is somehow commoner, certainly cheaper than pulchritude.

No, we cannot let that pessimistic phrase go unmodified. Beauty on sale finds its only compensation in money, while genius is willingly, gladly paid in part by the chance for expression and the joy of appreciation.

And this ends our brief and sketchy history of Motion Pictures. It was our intention to tell what Motion Pictures are, but with a Picture Theater in every block and in the down-town districts a half-dozen to the square, the humor of such a thing appealed to us and we advise the reader to inform himself as to what motion pictures be from a personal experience or by studying the bill-boards. Sufficitat.

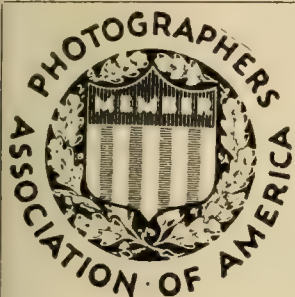
## A Word About Close-Ups

In making your home movies, don't overlook the value of the close-up, or motion picture portrait. Remember that, as an explanatory medium, or as a means of expressing emphasis, the close-up is excelled only by the written or printed title, and there are occasions when a title, despite its obvious need, seems a bit incongruous in a picture. In such cases—when, for instance, a point is almost, but not entirely clear—the close-up solves the problem nicely.

Note the numerous close-ups in the professional pictures you see at your theater. Wherever the director can substitute a close-up for a title, he does so, and his picture assumes the smoothness and "easy-running" quality that so nicely carry the plot to a climax. It may truthfully be said that the close-up determines, in large measure, the success of every motion picture production.—Exchange.

## A Correction and an Apology

In quoting the Cine Miniature in our January issue we inadvertently credited its publication to the Cameron Publishing Company, whereas Leonard Cordell of 1636 North Washtenaw avenue, Chicago, Illinois should be accorded that honor. The praise given the Cine Miniature is deserved and hereby goes to the proper party.



## Association News

ALVA C. TOWNSEND, Lincoln, Nebraska, *President*  
 CHAS. AYLETT, Toronto, Canada, *1st Vice-president*  
 D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*  
 JOHN R. SNOW, Mankato, Minnesota, *Treasurer*  
 J. W. SCOTT, Baltimore, Maryland, *Chairman Commercial Section*  
 PAUL TRUE, New York City, *Chairman Manufacturers Bureau*  
 L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*



The P. A. of A. Forty-sixth Annual  
 Convention at Louisville

Vice-President Charles Aylett announces that he has secured for the program of the Forty-sixth Annual Convention Mr. Richard N. Speaight of London, England.

Mr. Speaight is known internationally. He is a past president of the Professional Photographers' Association of Great Britain and Ireland. At the present time, he is honorable treasurer of the Association, and is known as being in the first rank of the photographers of England for the artistic quality of his work.

In addition, he is known on account of the fact that he has probably photographed more of the nobility and royalty of England and the European continent than any other photographer. He has photographed Queen Victoria, King Edward and other members of the royal family of England. In addition, he has been called to Madrid to photograph the royal family of Spain, and to Brussels

many times to photograph the royal family of Belgium, and other notables, including the President of France, the Crown Prince of Japan, the Crown Prince of Germany, the Prince of Wales, etc.

He is a Fellow of the Royal Photographic Society and for services in connection with the Children's Hospital in London he was made a life governor. During the war, King Albert conferred on him the Cross of Chevalier of the Order of Leopold II for photographic services rendered to Belgium.

There has been an unusual demand for trade space at this convention. Inside of a couple of days after the floor plans were mailed out, practically \$11,000 worth of space had been sold to the following firms: Photogenic Machine Co., Youngstown, Ohio.

The Haloid Company, Rochester, N. Y.  
 Cooper Hewitt Electric Co., Hoboken, N. J.  
 Bausch & Lomb Optical Co., Rochester, N. Y.

Burke & James, Inc., Chicago, Ill.  
 California Card Mfg. Co., San Francisco, Calif.

AnSCO Photoproducts, Inc., Binghamton, N. Y.

Eastman Kodak Co., Rochester, N. Y.  
 Norman-Willeys Photo Supply, Inc., Chicago, Ill.

Colegrove Bros., Inc., Buffalo, N. Y.  
 The Gross Photo Supply Co., Toledo, Ohio.  
 Presto Manufacturing Co., Pittsburgh, Pa.  
 Ilex Optical Co., Rochester, N. Y.  
 Hammer Dry Plate Co., St. Louis, Mo.  
 A. M. Collins Mfg. Co., Philadelphia, Pa.  
 Mallinckrodt Chemical Works, St. Louis, Mo.

Defender Supply Co., Rochester, N. Y.  
 The E. N. Lodge Co., Columbus, Ohio.



## CAMERA CRAFT

The Holliston Mills, Inc., New York, N. Y.  
 L. M. Johnson, Inc., Chicago, Ill.  
 Taprell, Loomis & Co., Chicago, Ill.  
 Pako Corporation, Minneapolis, Minn.  
 The Chilcote Co., Cleveland, Ohio.  
 Fowler & Slater Co., Cleveland, Ohio.  
 National Carbon Co., Cleveland, Ohio.  
 Eastman Kodak Stores, Inc., Chicago, Ill.  
 James H. Smith & Sons Co., Chicago, Ill.  
 G. Cramer Dry Plate Co., St. Louis, Mo.  
 Beattis's Hollywood Hi-Lite Co., Hollywood, Calif.  
 Blum's Photo Art Shop, Chicago, Ill.  
 Sprague-Hathaway Studios, Inc., West Somerville, Mass.  
 The Gevaert Co. of America, Inc., New York, N. Y.  
 The Halldorson Co. Chicago, Ill.  
 Fred M. Lawrence Co., Chicago, Ill.

### The Professional Fellowship

How many Professional Photographers

know that the Photographers' Association of America is authorized to confer fellowship degrees? How many are as keenly ambitious of the distinction as would be the professionals of European countries? Wake up, brothers. Shoot a little idealism into the sordidness of your daily life. Attune your ears to something a bit loftier than the music of the cash register. Submit three photographs each year for four years, which will be judged by five different judges and marked on a percentage basis. If you secure an average of 80 per cent you are made a Fellow in Photography. As a distinction for its own sake it is greatness earned and acknowledged: As a profit-getter it should mean much. If I were a layman and were looking for someone to picture my mug, my hopes for mercy and a good likeness should be placed in the man who had achieved a Fellowship.



### Master Photo Finishers of America

A. E. Block, President.....	27 Von Hillern St.,	Dorchester, Mass.
Fred. Mayer, Vice-President.....		Portland, Ore.
Wm. J. Meuer, Treasurer.....	212 State St.,	Madison, Wis.
Guy A. Binzham, Executive Manager.....	Box 1020,	Rockford, Ill.

#### Territorial Vice-Presidents

South-Western States: W. F. Honnen.....	1240 S. Main St.,	Los Angeles, Calif.
North-Western States: C. M. Coffey.....	284 N. Commercial,	Salem, Ore.
Mid-Western States: Chas. W. Lynn.....	3917 Orleans Ave.,	Sioux City, Iowa
North-Central States: John H. Seamans.....	7052 Jeffery Ave.,	Chicago, Ill.
Central States: E. L. Hurlburt.....	315 St. Louis St.,	Springfield, Mo.
South-Central States: J. A. Hammond.....	Box 650,	Meridian, Miss.
South-Eastern States: Elon C. Robison.....	105 Third St. N.,	St. Petersburg, Fla.
Great Lakes States: C. P. Phillips.....	6930 Gratiot Ave.,	Detroit, Mich.
Dominion of Canada: W. A. Taylor.....	274 Carlton St.,	Winnipeg, Man., Can.
Central Coast States: Wm. H. Eichner.....	1210 "G" St.,	N.W., Washington, D.C.
New Jersey—New York City: J. G. Taylor.....	24 E. 23rd St.,	New York City
New England States: H. K. Atkins.....		Middleboro, Mass.
Mid-Eastern States: M. J. Koch.....	535 Penn Ave.,	Pittsburgh, Penn.

### Northern California Division

As this is written Guy Bingham is moving rapidly toward us and the important meeting called for January 21st. As we go to press a day or two later than that date and our copy is in form and locked by then we shall have to defer the report of the meeting till the next issue.

The new president of this division is proving an aggressive and effective officer and the present secretary, lacking none of the pugnacity of our highly esteemed former incumbent still has a camaraderie that seems to go well with the membership.

Now that Guy is to be on the field we may expect an increased coherence which shall lead to great things. A little infusion of outside enthusiasm and the hearing of truths from afar should help in local problems.

### Portland Photo Finishers

On the evening of January 14th, a banquet was tendered to Guy A. Bingham by this very live local, under the auspices of the Oregon Division and under direction of D. Perry Evans. The finishers went into business session with Mr. Bingham and the guests carried on (sic) with Mr. Evans in another hall.

## And Next Month Things of National Importance to Photo Finishers



## Pacific International Photographers' Association

Embracing Alaska, Alberta, Arizona, British Columbia, California, Hawaiian Is., Idaho, Montana, Nevada, Oregon, Utah, Washington.

WILLIAM M. BALL, President; Corvallis, Oregon

## PHOTOGRAPHS *Live Forever*



CHET COFFEY

Everyone in the Northwest knows Chet and those who worked with or for him esteem him the more highly for their closer contact. Formally speaking he is designated as Mr. C. M. Coffey, but bless your heart he has so many intimates and is so generally held in affection that no one would know which Coffey you meant if you spoke of Mister.

In that coherent, aggressive body of photographers, commercial, portrait and finishers of Oregon and Washington were several outstanding figures, men and women who did things for a general good,

who gave of time, of effort, of money to perfect an organization that should function for the broad benefit of their profession. They had their problems and met them, they had their differences and adjusted them and emerging from a period of trial and stress the Northern Association qualified as strong and potent.

Chet, the Photo Finisher, was one of the group who proved that all interested in wresting an income, from whatever branch of photography, were vitally interested in the same things and in one another. He was one of the able men who proved the contention and sold it to his fellows. He was one of those who built the organization.

And then the Northwest and the California associations merged and became the P. I. P. A. and the problems which had been a matter of more or less local magnitude and importance became augmented to those of the entire West. The Pacific Coast, Hawaii and such adjacent points as the Philippines offered differences of opinion and varieties of needs that had to be met and adjusted. Chet became as active in the newer and larger body as he had been in the Northwestern.

Chet is now Treasurer of the P. I. P. A. and the shrewd look in his eyes denotes that he is sizing you up and trying to determine whether your dollars have come in to strengthen his accounts. These treasurers, you know, dearly love to report a fully paid up membership and large surpluses.

Anyway, if any member of the P.I.P.A. lives so far away that he has not met Chet Coffey, this is his chance to get an eyeful and through this page become intimately acquainted with one officer after the other.

**And Photographers are the ones who make them  
LIVE FOREVER**

# HIT CHAT

About our friends.



Ye Editor Retaileth Neues of Ye Profession and in Quaint Italics Titillateth Ye Sphynx with Hys Quill

## Kathleen MacGregor Requiescat

Elegies may be sweet, eulogies sincere, when the maker of them recalls the departed as the heart sings in the remembering. This dear lady filled her place in life completely, she was a loving and beloved wife and mother and to her business associate, J. W. Beattie, an almost indispensable helper. She filled her place on earth and the place that was reserved for her in a better existence, one that shall, perhaps, be hers for eternity, was a void till she went to fill that.

May the bereaved find consolation in the thought that she has been spared that mourning which might have come had one of her dear ones gone first, and that she has but exchanged the pleasures and cares of life for an everlasting happiness, in which she waits for them.

## Photographers' Day at Ad Club

The East Bay Photographers' Club was the host at the annual Photographers' Day and Luncheon of the Oakland Ad Club on January 10. The walls were covered with exhibits of the work of local commercial men and the National Exhibit and a splendid attendance carefully viewed the prints and seemed impressed by their excellence. Mr. Sigismund Blumann was the speaker of the day and devoted himself to the value of photography in merchandising.

## All Right for You, Frank

Frank Chambers has good-naturedly dubbed us the Poet Laureat of Photography and suggests that Charlie Abel is striving to usurp that position. Well, we are ready to hand the laurels to anyone, preferably to Charles who has been good to us at every meeting. But Frankie, old top, no one shall ever have the temerity of encroaching on your domain as the Dean

and Master of Photographic Story Tellers. You are a raconteur by innate rights. And a good fellow to boot. We are, in fact, all of us good fellows, aren't we? And thus the amenities are preserved.

## Mr. M. Clark of Cleveland

We received a visit from Mr. Clark who is making a tour of the metropoli of this country for the purpose of taking photographic surveys of the building, points of interest and scenic environs. He is a friend of our old friend Don C. Coleman, which makes him a friend of ours.

## Leonid Fink

In the field of ultra progressive photographic art the name of Leonid Fink rings like a bell. He dropped in to see us one day in January on his way to Los Angeles to fill several months with sittings ordered in advance and will return to Seattle to help design and decorate the famous annual artists' ball in his home city. Mr. Fink has temperament and is as full of high art as an egg is with meat but he seems to have discovered the way of being prosperous, withal.

## Miss Martinez

A little lady was ushered into our sanctum and for some time we were conscious only of a pair of eyes. Then an ebullient bijou of enthusiasm evolved from the haze of those Ojos and we knew a very charming, very diminutive senorita was bewitching the world. Miss Martinez is more than eyes and charm, however, for she has a very serious object in life and a very great ambition. She is an artist. Her portraits in color, by whatever medium, are works of art—not just tinted photographs. They will bear the critical observation of painters and certainly will gain her the commendation of her fellow professionals.



## CAMERA CRAFT

### William C. Mackintosh

#### Requiescat

We remember him fondly. A jolly soul who enlivened any occasion and warmed any stranger to the feeling of welcome. My, my, but it is so long ago—the time when he was president of the California Camera Club and introduced us to a packed meeting where we spoke on the art of Nancy Ford Cones. He said little but accomplished much in a few words. We met him often since and always were the happier for the moments of his company.

And now he has gone. In the prime of mature manhood and so hardly to be spared. At our age, past the meridian, we are especially qualified to be sympathetic with the occasion for the question arises, who next? And to condole with a depth of feeling born of experience with those left behind.

May God temper the grief of the bereft and grant them consolation in kind remembrances.

### Middle Atlantic States Convention

The Middle Atlantic States Photographic Salon, in the foyer of the Benjamin Franklin Hotel, Philadelphia. Open to public from April 18 to 27, 1928. Under direction of John A. Erickson and Richard T. Dooner.

#### Prizes

\$300.00 gold—Best portrait print. Open to world. Entry fee, \$2.00 each print.

\$200.00 gold—Best commercial prints.

\$50.00 each—Architectural Interior, Exterior, Ad-Selling, Historical Landscape, Technical, Industrial. Entry fee, \$1.00 each print.

\$600.00 American Cup (J. B. Schriever trophy). Solid silver. No entry fee—Best three portrait prints. Permanent award after three times winning.

Prize-winning prints to become property of Middle Atlantic states. Prints may be reproduced if this right is not specifically reserved.

#### Rules Governing

Photographic prints of any kind may be submitted.

Prints to be mounted on light-toned stock and conform to 11x14, 14x17, 16x20, 18x22, and contain maker's name and address on back. Sent to Richard T. Dooner,

Benjamin Franklin Hotel, Philadelphia, Pa., before March 25, 1928.

Prints will be selected and judged by a competent jury, who shall have full power to accept or reject.

Prints will be properly lighted and hung under glass.

Salon certificate will be awarded each accepted print.

Prints will be returned promptly, but the M. A. S. assumes no responsibility for loss or damage to them.

Foreign contributors may send prints unmounted.

Any number of prints may be sent, but separate entry fee will be required for each print.

If prints are offered for sale or exchange, price, etc., should appear on entry form.

To avoid customs on foreign entries, all prints should be sent by post only and plainly marked "Photographs Only. No Value. To Be Returned to Sender."

Printed catalog will be sent each exhibitor. Extra copies may be had at \$2.00 per hundred.

### Photographers of Northern California

The notice said: "Come—bring your wives, families and friends." Either those who had no wives, families or friends felt themselves excluded or something, for the attendance was below the deserts of the program. It was an artistic success and those who did come were well repaid. L. A. Ireland, Secretary of the Commercial Photographers of San Francisco, spoke on Merchandising Photographs and made his points tersely and aptly. Ralph Young, President of the same organization, expounded the Pictorial Qualities of Commercial Photographs and scored repeatedly as Ralph usually does. He illustrated with certain of the prints of the National Commercial Exhibit hung on the walls.

### Jukes Sells Stock

M. F. Jukes, widely-known Bellingham photographer, has sold his stock in the Jukes studio of photography at 1329 Cornwall Avenue to his partners, George E. Barber and H. H. Vinson. He held a third interest.

Mr. Jukes says that he has no plans for the future to announce.



# PHOTOGRAPHIC DIGEST

Edited by H. D'ARCY POWER, M. D., F. R. P. S.

## The Technics and Pictorialism of Lantern-Slide Making

(Continued from November)

If there is any difficulty about getting adurol, we can get very beautiful tones of the same kind by means of variations of the metol-hydroquinone developer.

Here is a formula:

Developer K—Water .....	20 ozs.
Metol .....	50 grs.
Hydroquinone .....	35 grs.
Sodium sulphite, an- hydrous .....	240 grs.

Note, this formula, as I shall refer to it again.

For use, take 6 drams of the above K solution, 2 drams ammonium carbonate 10 per cent solution, 2 drams ammonium bromide 10 per cent solution, 1 oz. water. Use at a temperature of 75 deg. F. or thereabouts.

The use of sodium carbonate with this developer tends to give colder colors, as does also the substitution of potassium bromide for the ammonium bromide.

I need hardly remind you that an increase of the bromide will require also an increase of the exposure.

It would appear that ammonium bromide tends to give warmer yellowish browns, whilst the potassium salt gives a colder color.

If we desire sepia browns, we can get very fine ones by the addition of 15 minims of a plain 10 per cent solution of hypo to the ounce of the above developer, and by increasing this to 30 minims we get a cold sepia.

Of course, this by no means exhausts the list of developers by which we may get fine brown-colored slides, but as I am speaking solely from my personal experiences, I will only refer to one other before passing on. Mr. A. C. Banfield brought to my notice paraphenylenediamine as a developer that gave distinctive brown tones

with a remarkably fine-grained image, but the time of development being 20 to 30 minutes for each slide, it was altogether too slow for me, and I turned my attention to the acid amidol formula recommended some ten years ago by Mr. Raymond Crowther for physical development. I did not seem to be getting any very important result from this when it occurred to me to try mixing these two developers together. At once I had a developer that brought up the image in 10 seconds, and with a development factor of 20 completed it in 3 minutes. The colors yielded by it ranged from a brownish-black to a greenish-brown black of fine quality and very fine grain. In fact, it promises to be a useful acquisition.

Beautiful as are the results that can be obtained by these methods of development, I myself prefer the developer which we have come in these recent years to term the "thiocarbamide developer," because its peculiar qualities are due to the use of that chemical as a constituent part. The resultant image is of very fine quality, with unusual transparency in the deeper tones, whilst a very wonderful range of colors is obtainable on slow plates by modifications of exposure, developer and temperature. For blacks—warm black, blue-black and purple-black—it cannot be matched, and its range of colors in greys, blue-greys, blues and purples is unique. It is equally good at giving rich deep tones or the most delicate effects.

The slides shown will be sufficient to give you an idea of the wide possibilities of this process.

In November, 1918, I gave all the working details in a paper read before the Royal Photographic Society, which will be found printed in the "Photographic Journal" for December of that year, so I need not repeat them on this occasion. By an unfortunate error the development formula

was wrongly printed in that paper, the sodium carbonate being omitted; but not much harm was done, as the developer works quite well without the sodium carbonate, although rather slowly.

A few months ago, finding difficulty in obtaining good blue and blue-grey tones with the old developer, I made some experiments to devise an improvement, and found that the following formula, which I know as developer "S," gave me better results:

Developer S—6 drams Solution K (as already given), 2 drams ammonium carbonate 10 per cent solution, 1 dram potassium bromide 10 per cent solution, 30 minims thiocarbamide solution, 1 ounce water. Used at 75 deg.; at 70 deg. it gives a colder blue color.

The thiocarbamide solution is made by dissolving 33 grains thiocarbamide and 11 grains ammonium bromide in 10 ounces water. The chemistry of the process has not, so far as I know, received any special attention. A fairly lengthy communication from Dr. Kenneth Mees was printed in the "B.J." in the autumn of 1909, but it deals purely with the observed facts (which my own experience confirms) and not in the hidden chemical actions. Much useful information bearing indirectly on the subject is contained in Mr. Chapman Jones' Presidential Address to the Royal Photographic Society, printed in the Society's "Journal" for December, 1912. He mentions that he subjected some slides made by Dr. Mees by the thiocarbamide process to a test which seems conclusive of the permanence of the colors obtained, whereas slides of a brown color produced by the usual warm-tone developers gave evidence of doubtful durability. His conclusions are that the particles of silver, when in a very fine state of subdivision, scatter light having a wave-length bearing a certain relation to the size of the particle, and only transmit the waves of those colors that are not intercepted. There are particles so small that they only intercept the ultra-violet, and are therefore transparent to the eye; but for all practical purposes we may say that the smallest particles transmit red light and the larger particles purple, blue and grey, in the order of their

size, until they finally are opaque and therefore black.

#### Note

Dr. Power's notes on the Technic and Pictorialism of Lantern-Slide Making will run through several issues. We advise our readers to follow them closely as they represent the mature thought of an authority.

#### Pinholes In Negatives

Another correspondent, Mr. J. C. P. Cave, writing to Nature deals with the above important subject. He first shows by numerous experiments running over most of the well known plates that the belief that dusting a plate electrifies it to the point of attracting more dust is a delusion. He says: "I now wipe the sensitised surface of the plate with a pad of velvet, and have found a very considerable diminution of pinholes as a consequence; a single sweep of the velvet across the plate is sufficient."

As to dealing with the holes he writes: "Probably a professional finds little difficulty in spotting out pinholes, but, as I have said, the amateur finds a good deal of difficulty. When using water-color, for example, if there is too much color on the brush, or if it is too watery, the color leaves the pinhole and collects in a circle around it, thereby aggravating the evil; if one uses the brush very nearly dry it entails taking fresh color for nearly every pinhole, and the process becomes very laborious. I have lately, however, taken to using ink supplied by the Cambridge Instrument Co. for their recording apparatus; this ink consists of coloring matter dissolved in nearly equal proportions of glycerine and water with a small admixture of gum arabic. This, used with a fine brush, makes the best medium I know of for spotting out pinholes; it takes longer to dry than, say, water-coloring, but this disadvantage is far outweighed by its ease of application."

This is very much what I do myself, except that I employ an excellent French ink sold under the name of *Couleur liquide*, *Noire d'ivoire*, and I am very careful to dilute it to the depth of tone at the spot where it is employed. I prefer a mapping pen to a brush.

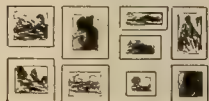


SALON WEEK  
IS COMING

EVERY PRINT  
A WINNER



# CLUB NOTES



## Forthcoming Exhibitions

March 5 to 31, 1928. Second Biennial Salon of Pictorial Photography of the Syracuse Pictorialists. Address Kent C. Haven, director, 340 Montgomery Street, Syracuse, N. Y. Closing date February 10th.

March 9 to 27, 1928. First International Salon of the Association of Czechoslovak Clubs of Amateur Photography. Address Jan Volny, Secretary, Liliova 8-111, Prague 1, Czechoslovakia. Closing date February 1st.

March 17 to April 15, 1928. Pittsburgh Salon. Address B. H. Chatto, Secretary, 1300 Milton Avenue, Pittsburgh, Pa. Closing date February 4th.

May 1 to 14, 1928. Second International Salon of Japan by the All-Japan Association of Photographic Societies, Tokyo. Transferred at close to Osaka June 1 to 7. Closing date March 31. Address Tokyo Asahi Shimbun, Tokyo, Japan.

May 11 to 24, 1928. Fourth International Salon of the Seattle Camera Club, 422½ Main Street, Seattle, Washington. Closing date April 5th for foreign, April 15th for U. S. A.

## Dear Billy Alcock



When we published the article on Bill we had no portrait of him to offer our readers. We now are happy to give his friends what we consider the best, most realistic image of the best fellow in the world. It is his face to the line. It is as

we know him, as everyone knows him and loves him. It is by an artist who must have the same affection for our friend that we have. We stress this matter of sentiment because we have yet to meet the man or woman who speaks of William Alcock without prefixing the dear.

## Los Angeles Pictorialists

Membership in the Los Angeles Pictorialists is by invitation only.

During the past month invitations have been extended to Mr. Raymond P. Winters and Mr. Phil Hanna, to become members.

Mr. Raymond P. Winters is one of the foremost commercial artists in the city. He not only is a photographer of ability, but also a member of the Institute of Graphic Arts.

Mr. Phil Hanna has written several interesting articles for your publication, on the Los Angeles Salon. He, by the way, is editor of "Touring Topics," one of our best known Southern California publications, produced by the Automobile Club of Southern California. His photographic work is most excellent.



#### The Eastman Medal

Awarded for the first time this month to the photograph judged best in the Kodak International Salon of Photography. This year's salon, in Rochester, New York, was the second annual. Last year's was held in London, England. This year members of the Eastman Kodak organization in nineteen countries entered photographs.

#### Two New F. R. P. S.

We take pleasure in announcing that Miss Sophie Lauffer and Nicholas Haz have achieved a Fellowship in the Royal Photographic Society of Great Britain. It is a reciprocal honor. The title is a worthy one and they bring credit to the society that conferred it.

#### Syracuse Pictorialists' Salon

We wish to announce further in regard to the Syracuse Salon, to be held in March, 1928, that ten certificates of honor will be issued for the ten best prints exhibited, regardless of class. The certificates will be suitably engraved and will be a deserving memento of our exhibition.

We are indebted for this departure from the usual in this country to a suggestion from a fellow associate, Mr. Harold W. Cole, president of the Schenectady Camera Club. The committee felt that his counsel was deserving of favorable action.

#### The Japan Salon

The Second International Photographic Salon of Japan, under the auspices of the All-Japan Association of Photographic Societies, will be held in Tokyo May 1 to 14, 1928 and at Osaka June 1 to 7, 1928. This Association extends a cordial invitation to all American photographers to exhibit and it is open to both professional and amateur photographers. The conditions of entry are as follows:

1. Prints of any photographic medium may be submitted.
2. Prints of one contributor must not exceed six in number.
3. Sizes of prints must **not** be less than eight inches in length.
4. Foreign contributors must send **one dollar**, or its equivalent, as the entrance fee. Several contributors forwarding their entries together must each send the fee.
5. The entrance fee and entry form must be sent separately from the prints. The entry form must be accompanied by remittance addressed to The International Photographic Salon, Tokyo Asahi Shimbun, Tokyo, Japan.

The last day for receiving prints is March 31, 1928 and any photographer in the States who is interested in exhibiting can obtain an entry blank from the Wollensak Optical Company, Rochester, N. Y.

#### William Horace Smith Pictures

During the month of October the above young artist had a collection of some fifty prints hung at the Camera Club of New York. It has been our recent great pleasure to see the pictures and we speak with mildness when we say we revelled in them. Smith is going to establish himself at the top and is very near that now. What some of the prints lacked in minor technic, all made up in a sensitive sense of rythm and a perfection of composition. The poesy evinced in many really sang to us. As examples of what the camera may be made to do in musical and poetic rendering through the nuances of monochrome, the pictures of William Horace Smith stand forth as brilliant exemplars.

The collection will hang on the walls of the California Camera Club for the entire month of January and at this time, well past the middle of the month, has given pleasure to many members and visitors. We hope to give our readers an opportunity of seeing some of his work and to tell them of the man and artist in a forthcoming issue.

#### Cleveland Photographic Society

At a meeting of the Cleveland Photographic Society, held Wednesday evening, January 4, the following officers and trustees were elected for the year 1928:

Ralph D. Hartman, president  
 Prof. Homer D. Rankin, vice-president  
 George Cook, financial secretary  
 George Y. Tange, treasurer  
 Lloyd Dunning, secretary  
 L. B. Canfield, trustee  
 Henry Mayer, trustee

The club has shown a remarkable growth and now has approximately 160 members enrolled.

It was also announced at this meeting by President Hartman that the Cleveland Photographic Society has been honored by being elected an associate member of the Royal Photographic Society of London, England.

## An Example of Real Amateurism

The term Amateur has too often been given a contemptuous meaning. It means and should express the spirit of doing for the love of the thing, without desire for compensation. The head of the Midzuho Company, of San Francisco is a Japanese gentleman who deals in photographic supplies and materials of a kindred nature. He is a moving spirit of the Japanese Camera Club of his city, and at the recent Salon of Members Prints he donated a number of fine silver cups without mention of himself or his firm, either on the gifts or by printed or spoken word. All honor to Harley.

## Pictorial Photographers of America

The meeting for December fifth featured the making of a study of a head and seated figure under the direction of well known workers, followed by discussion and argument inspired (we almost said incited) by the image on the ground glass. It is a pity the society is not more prosperous so that the prints made from the negative so produced with the arguments in pamphlet form might not be sent to all members. Distant members are so out of touch. They only know the P. P. of A. exists when they get the usual postal, a solicitation to buy a book, or the bill for dues. There is a possibility that if remote members could be taken more directly into the activities an increase of increment would result.

We are all too prone to take the best things in life as a matter of course until they no longer are at hand. The Pictorial-

ists of America offer an organized body functioning with system, experience and enthusiasm for the betterment of artistic photography and for the maintenance of those activities which offer stimulus and incentive to pictorial work. Professionals no less than amateurs profit by the education of the public to an acceptance of photography as an art.

The casual acceptance of this organization has led to its neglect by many who should most actively support it. It has been richly endowed with praise but poorly supported with money. What have YOU done for it? What are YOU willing to do?

Here is an opportunity to give something, small though it be, to the art that has given you so much in pleasure, betterment, and profit.

The following is a brief outline of present and future plans which have been approved in principle by the executive committee at a special session for that purpose. The details, which involve amendments to the constitution, will be carried out in the near future.

I. Raise the balance of a sum of two thousand dollars (\$2,000) in gifts, to be known as the book fund, by an appeal to members in the form of this letter. (\$1,000 has been raised).

II. Segregate all outstanding bills, making a separate account of expenses incurred by the book.

III. Pay these accounts off in accordance with recommendations of the book finance committee, with the amount to be collected in the book fund. (This plan has been followed, half of our indebtedness being cleared off already.)

IV. Open a new and separate bank account for the returns from future sales of the books still on hand—all editions.

V. Appoint a chairman of a book finance committee, (Mr. Wm. D. B. Motter Jr., 25 Broadway, New York, has been appointed) whose duty it shall be to consider and approve estimates on all work pertaining to future editions of the P. P. A. book; to attend to the settlement of accounts pertaining to the book, present and future, and to advise as to the financing of all future editions. This chairman shall act as treasurer of the book account.



## CAMERA CRAFT

VI. Appoint a chairman and committee to take charge of and to promote the sales of the book at all times. (Mr. Jerry D. Drew, 63 Cliff street, New York, has been and is carrying on this work.)

VII. Make arrangements now for an International Salon early in the spring of 1929. (This has been done and the time will be March.)

VIII. Select the pictures for the next book, Volume V, from material submitted (not necessarily hung) for this salon, (which will mean a saving of about \$300 for circularizing, wrapping and shipping as well as much labor). Place all material for the book in the hands of the printer by June 1st, 1929, deliver to the book-binder by September 1st and have it on sale October 1st. (Summer time being the dull season for the printer, we should get a lower price on work if done at that time).

IX. Appoint a business manager of the book, who will have jurisdiction over the jury, text writers, publishing committee, printer, binder, and sales committee to the extent of seeing that all work co-ordinates with the prescribed time schedule.

Get ye busy then, good photographers, and send in something. It may be a dollar or it may be ten. Your means and your generosity shall govern you. But send something and let us put this over the top with a bang.

And, as you hope to keep pictorialism alive, join, Join, JOIN. Send for the application for membership today and get your friends in club and private life to join with you.

### Durban Camera Club Salon

From November 23 to December 3 the Durban Camera Club held salon and from reports to hand it was an outstanding show. There were loan collections from many overseas societies but unfortunately the leading British workers delayed just a few days too long and their pictures arrived too late for the hanging. These shall be shown, however, in a proper room in Durban before being shipped with the entire collection to Port Elizabeth, Rustenberg and Cape Town.

The club announces high hopes and many constructive activities planned for

the coming year and a letter just received from Andrew Goldie, Esq., honorable secretary and treasurer, palpitates with an enthusiasm that is warmth to our hearts. Photography has no lasting charms for the lukewarm, but for the enthusiast it holds a lifelong joy that no other avocation, certainly no other pastime can offer. More power to you, dear friend, and may your organization grow larger and stronger, but above all may it retain its clubbiness and continue strictly photographic.

### A. C. C. of A. Interchange Cup

The Los Angeles Camera Club has the honor of being the first club to win the recently-announced Print Interchange Trophy put up by the Associated Camera Clubs of America. With seventeen clubs submitting sets of prints which in the aggregate totaled over five hundred prints, this was a worthy achievement. The club winning the trophy three times, not necessarily in succession, will be the final winner. The cup is of beautiful Grecian design, standing over twenty-one inches in height. Cleveland Photographic Society came a close second.

The A. C. C. of A. announces the addition of the Department of Photography, Brooklyn Institute of Art and Science, as an active member.

### The American Photographic Society

If the Senators and Congressmen and the Curator of the Smithsonian are getting as many letters and are being bombarded with as much enthusiasm as I, the American Society with its Pictorial, Scientific, and other associateships and fellowships is going to go over in 1928. Don't lay down on the project. Persistence and determination will win. As Americans we are entitled to anything that is good that any other nation has. The Royal is the greatest Photographic Society in the world. Join it. Find its value in exhilaration, incentive, works. Then see that there be an American Society so you may belong to that, too. God Save King George and his subjects who succeed in doing so many outstanding things. And God help us to do a few things along the same lines. Are you on? All right. We're off.

# NOTES & COMMENTS



## The Simplicity of Modern Photography

Many a camera user, even though he be full of enthusiasm, works with the hobgoblin of failure ever at his elbow. In the majority of such cases it is a faulty realization of the nature of photography that produces the never-ending crop of useless negatives and feeble, disappointing prints. The truth is that photography, although truly an art, has been built up on a scientific foundation, and, for this reason, is continually evolving. As a rule, the unsuccessful photographer is one who refuses to take advantage of the enlightenment brought about by scientific research and improve his working methods accordingly.

If any photographer needs to be convinced of the importance of the influence of science on practical photography we advise him to get a copy of an attractive little book that has just come into our hands. The title—"Scientific Simplicity in Photography"—will appeal to all thoughtful photographers, and the contents of the booklet can certainly be commended to camera users of all grades of skill and experience.

Although so full of information, this book will be sent, post free, to any reader mentioning this journal and applying to Burroughs Wellcome & Co. (U. S. A.) Inc., 9-11 East Forty-first street, New York City.

## Quartz Lenses

In every community a certain number of photographers are sufficiently enthusiastic to allow themselves a battery of lenses. Here and there a professional photographer thinks enough of his art to equip with special lenses for special purposes. Everywhere the scientific and criminalological photographer must have particular sorts of objectives for the variety of their subjects.

The Kalosat is a Quartz Lens that is not an anastigmat. No claims are being advanced for its having such qualities. It

is not an ordinary diffusing device. It is a portrait lens and a landscape lens that gives effects that can be gotten with none other. In criminalology it is indispensable. The Kalosat cannot take the place of the lens you are using, but it seems to us to be the most valuable running mate to any lens you may have. Find out about it for yourself. Inform yourself by writing to the Hanovia Lens Laboratories, Newark, N. J.

## Harry De Vine With Ansco

Everybody in the trade knows Harry De Vine. He has been prominent as an important factor at the National Association conventions, as a business man who carried efficiency and artistry into the very mechanics of photographic practice. Photo finishers know him and like him. That he is now in charge of one of the professional departments of Ansco will be received as good news. The connection is a happy one for Harry and for the Ansco concern.

## Ansco-Agfa

A most important announcement has been made on Trade of the amalgamation of Ansco Photoproducts, Inc., of Binghamton, New York, and the Agfa Corporation of New York and Germany. The name is still to be given, whether Ansco-Agfa or Agfa-Ansco, but the policy is said to be that Ansco will govern the sales and Agfa concentrate on production. A \$2,000,000 factory is projected at Binghamton. Official announcement from the interested concerns will probably be more definite and appear shortly.

## Japanese Water Colors

Probably the first photographic colors on the market were those produced by our friend Nicholson of Diamond Place, Rochester, N. Y., and he is still making them, as good as ever, since they can be no better, and with ever-increasing popularity. At this writing the Japanese Water Color Company is enrolling students for

## CAMERA CRAFT

its new classes in Practical Color Photography. Up to the end of this year over three hundred photographers have availed themselves of the opportunity for learning to color prints, and a large proportion of these are earning a good living at the art. Descriptive booklet and other information await your request.

expense in a large amount of blue-printing and feels he would not part with the apparatus for many times its cost were it impossible to get another.

### Jos. Schneider & Co. Xenon F:2 Lens

The principal objections to extremely high speed lenses are their lack of definition and correction, slight depth of focus,



### A Remarkable Photograph

One of the bugbears of commercial photography is the reproduction of certain woods and their grain. Screens seem to fall down in some way or another but Thomas J. Smith of Stratford, Ontario, Canada, seems to have solved the problem simply enough. He proceeds in the usual way but uses a Leoty portable arc lamp. This picture was made with one of them on 25 cycle A.

Mr. Smith affirms further that the lamp named has enabled him to save time and

tendency to give coma, large bulk and expense.

These points were all taken into consideration when perfecting the new Xenon f:2 lens. The Gaus lens formula was worked out in a very simple and effective manner, using six elements. This lens is remarkably free from coma and spherical aberration. Its popularity with three color workers was instantaneous as tests revealed extremely good color correction.

Definition and covering power are most important in such a high speed lens and



these points were considered above all in perfecting this lens. The Xenon can be used at full aperture for an angle of 55 degrees. This is most remarkable for a lens of this extremely high speed. The definition is clear cut to the extreme edges of the film at full aperture. Used at the f:3.5 opening an angle of 72 degrees is obtained.

## New York Institute

Shortly after his graduation from the New York Institute of Photography, Mr. M. Gallo opened a portrait studio in the newest and largest of the famous Fifth Avenue hotels, the Savoy-Plaza.

This is an appropriate ending for 1927, the most successful year of the eighteen which have passed since the inauguration of the New York Institute of Photography

as a vital part of the photographic world.

To meet the demands of 1928, the employment and service departments of the institute have been perfected so that adequate assistance may be given to every student, whether enrolled in the commercial, portrait or motion picture departments, and to both resident and home-study students.

Preparations have also been made to increase the efficiency of the departments which handle the correspondence of the many students who live outside the United States, and particularly of those who live at such a distance that the mail transport time is a matter of consequence. The many students resident in Asia, Australia and the islands of the Pacific have made this step necessary.

# International Photographic Association

- 5569—Ruth Bender, Mount Pulaski, Ill. Desires to exchange general subjects. Class 1.
- 5570—Vanre Canaday, Box 322, Tekamah, Neb. Desires to exchange portraits for same. Class 1.
- 5571—Herbert Christoffero, 20 Hudson St., Norwalk, Conn. Class 3.
- 5572—E. H. Dewes, 3964 Arsenal St., St. Louis, Mo. Class 3.
- 5573—A. M. Engelman, 25 So. Van Lear, Dayton, Ohio. Class 2.
- 5574—Wilfrid T. Frost, 2362 Bancroft Way, Berkeley, Calif. Class 2.
- 5575—E. R. Gammage, Westlake, La. Desires to exchange nature, bird and animals for nature studies only. Class 1.
- 5576—Carol G. Land, 686 12th Ave., San Francisco, Calif.  $3\frac{1}{4} \times 5\frac{1}{2}$  and  $5 \times 7$  landscape views. Desires to exchange for general views and nature study subjects. Post cards only. Class 1.
- 5577—H. T. Niles, P. O. Box 2, Kimbolton, Ohio.

$5 \times 7$ .  $3\frac{1}{4} \times 5\frac{1}{2}$ . desires to exchange general subjects for same. Class 1.

- 5578—A. E. Stanyard, Box 175, New Brighton, Pa. Class 3.
- 5579—M. J. Warner, 2107 Fairmont Ave., Philadelphia, Pa. Class 2.
- 5580—L. A. Whitford, State College Station, Raleigh, N. C.  $2\frac{1}{4} \times 3\frac{1}{4}$  and  $3\frac{1}{4} \times 4\frac{1}{4}$  and enlargements. Desires to exchange general subjects for same. Class 1.

## RENEWALS

- 2442—Henley H. Hall, 4528 East Seminary Ave., Richmond, Va. Desires to exchange foreign views for scenery only. Class 1.
- 4413—Wilfred Hickman, P. O. 127, Fairmount, Ill.  $2\frac{1}{4} \times 3\frac{1}{4}$  and  $4 \times 5$  scenes, flowers and baby pictures; desires to exchange for same. Class 1.
- 5438—Fred. E. Clock, 83 Prospect St., New Britain, Conn.  $3\frac{1}{4} \times 5\frac{1}{2}$  landscapes, etc., likes to exchange for same. Class 1.

Send in your prints  
for the circulating albums, and let them  
be the best you can make.

# CAMERA CRAFT



EDITH ALLEN

NICHOLAS HAZ, F.R.P.S.

SAN FRANCISCO

CALIFORNIA



# *Gevaert*



## FOR PERFECT PICTURES

### **NOVABROM**

*For the Best Enlargements*

A fast, general purpose bromide paper.— Requires no special developer. Supplied in two grades, Normal and Extra Vigorous and in a variety of surfaces. For bromoil work advanced amateurs prefer: K 14—Double Weight White Coarse Matte

K 15—Double Weight Buff Coarse Matte

Other surfaces popular with pictorialists are: K 5, K 7, K 16, K 17, K 18.

## **SAHO PLATES**

Sensima Ortho Anti-Halo (Saho) *H & D* 500. Super Saho (*H & D* 700). High speed, non-halation plates, with excellent orthochromatic properties. The Favorite Plates of Pictorial Photographers.

*Descriptive Catalog at Your Dealer's or Dept. No. 4*

**THE GEVAERT CO. OF AMERICA, Inc.**

423 WEST 55TH STREET, NEW YORK CITY

CHICAGO, ILL.  
412-21 N. STATE STREET

PORTLAND, ORE.  
345 SALMON STREET

TORONTO, CAN.  
131 YORK STREET

*Dealers in Principal Cities of United States*

# The Winners

*Two Competitions*  
**MONTHLY**

of OUR COMPETITION PRIZES are so satisfied that their prints come to us before each month's judging.

Have you sent in yours? Why not give yourself the fun of trying to win one of the five prizes? You'll enjoy it.

Get your prints in before the 5th of each month.

## **Camera Craft Publishing Company**

703 MARKET STREET • SAN FRANCISCO, CALIF.



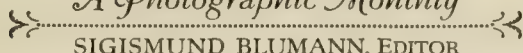




WAH HING CHANG  
*William Horace Smith*

# CAMERA CRAFT

*A Photographic Monthly*



SIGISMUND BLUMANN, EDITOR

*Claus Spreckels Building, San Francisco, California*

FOUNDED MAY 1900

VOL. XXXV

MARCH, 1928

NO. 3

## William Horace Smith Artist and Gentleman

By Sigismund Blumann



Picture a quiet spoken, gentle fellow with spectacles that accent his youth, eyes that sparkle with a sense of humor and a surcharge of enthusiasm, a sensitive mouth, and a general appearance of waiting to listen and learn, and a willingness to tell and teach, and you have the first impression of the subject.

We liked one another from the first meeting and after months of intimate acquaintance I can say Horace wears well. He improves on closer relationship, for his ideals come out little by little in action instead of the too often formulation in worded ethical phrases. He is an artist by divine right and somehow he is a gentleman with equal instinctiveness.

His work is peculiarly expressive of the man. We love to feel Smith expressed in his picture, "Vision Creates." That is not only his biggest achievement so far but a great achievement for any man. The poesy of the idea is lyric. It sings like a Tennyson poem. And the execution is as perfect. It was his first attempt at double printing. Would our hundredth effort might succeed half as well.

My meeting with the men of whom I write, my knowledge of the history of the men of whom I have written, has been mainly through their work. Faces mean much and a study of faces and character as shown in them has helped to more or less happy estimates on these pages. Where it has been possible to get such intimate material, what they had to tell of themselves has been printed. And so, we shall let Mr William Horace Smith tell us some material facts.



*Blanding Sloan, Etcher**William Horace Smith*

"My own art training made me keenly alive to the possibilities of pictorial photography and, although I cannot seem to recall any time in which I was not greatly inclined toward the finer types of photography, my first real incentive to work in that medium came with my acquaintance with Mr. Wayne Albee and Miss Ella McBride in their studio in Seattle.

"Both Mr. Albee and Miss McBride were kind and patient enough to answer many questions and among my most prized possessions are two fine pictorial studies, gifts of the artists who made them—one by Mr. Albee and one by Mr. Saichi Sunami, who along with Mr. Frank Kunishigi, was also doing some very fine things.

"I had a Brownie 2A Kodak and in my small studio made my first attempts at pictorialism.

CAMERA CRAFT



*Vision Creates*

*William Horace Smith*



*Mon Yuen*

*William Horace Smith*



## CAMERA CRAFT



*Chinese Newspapers*



*Shadows: Chinatown*

*William Horace Smith*

“Having always been particularly fond of children, I naturally chose them as my subjects for this first work and, while I liked the results and they greatly pleased their kind parents, too, I never felt that they were worthy of being submitted to a salon jury, being very, very conscious of their technical shortcomings.

“This matter of the technical side of photography caused me much concern and hesitation. However, it was my good fortune to meet Mr. Johan Hagemeyer, who at the time was in charge of a pictorial salon being held by a large department store in San Francisco, and to him I mentioned my misgivings.

“His counsel and advice proved a great stimulus. I purchased a better camera, a  $3\frac{1}{4} \times 4\frac{1}{4}$  Ansco with an R. R. lens, and, using film packs, I rigged up a little contraption which enabled me to see my subject right side up on the ground glass. This was a great help and my first real achievements were two (of many negatives) pictures of street scenes in San Francisco’s Chinatown. I added an Eastman horizontal enlarging outfit to my equipment and had the joy of making my first enlargements, 5x7’s, which looked very large to me until I saw them hung (the two prints mentioned) at the next salon held by the large department store—my first accepted and in fact my first submitted prints.

“And now, some four years later, I still get the same thrill out of every new little thing I do, each new thing I try, and am happy to say that the humble efforts to express the beauty seen about me have been accepted by fellow-lovers of the beautiful in the same spirit in which



*Phyllis*

*William Horace Smith*

they have been offered, which is that the knowledge that 'Happiness was born a twin and all who joy would win must share it.'

"My present hope and ambition is to build an outdoor studio in the seclusion of a lovely Spanish patio where I may work with my two favorite subjects, children and those whose dancing has as its ideal a contribution to the fine arts.

"In portraiture I also find people who usually do not photograph well of especial interest and I derive much pleasure from such sittings.

"My present equipment in addition to that already mentioned is a  $3\frac{1}{4} \times 4\frac{1}{4}$  R. B. Graflex in which I use film packs for compactness and easy portability and panchromatics with a K.2 filter for portraiture.

"I like to work outdoors on carefully selected locations suitable to the subject. My studio, which is in my home, has for its light one portable duplex junior arc light and one Miller spotlight, using a 250-watt Mazda globe.

*'Neath Arching Boughs**William Horace Smith*

"My portrait sittings are usually more like friendly visits than 'a trip to the photographers' and I much prefer it should be so. Outdoor sittings are really outings, especially when children and dancers are the subjects and the results are usually well worth any extra effort in the taking 'on location.'

"Perhaps my most amusing experience was the time I backed into the surf, intent upon getting my subject just right in composition, just in time to have an immense roller come down upon me as the result of its breaking upon a big rock just at my back. You can easily imagine such sittings being somewhat lacking in rigid formality!"

Thus you learn to know the man from his own words. An enthusiast in whom the joy of the amateur has not shriveled with professional activities. A photographer who maintains the artist's viewpoints, and unspoiled by success, without egotism or vanity, pursues his avocation and vocation for the love of it—even as you or I. Let us hope, even as you and I.



# Portraiture by Flashlight

By Thomas Southworth

Illustrated by the Author

(Continued from February Issue)



## THE EYES IN THE FLASHLIGHT

Let it be remembered that the Flashlight has no effect on the eyes, however, the Pre-exposure illuminant has. For this reason it is well to carefully compare the different effects from different intensities of pre-exposure illuminants. If the light is too weak, the pupil of the eye is too large and one may encounter objections from the sitter that the eyes are too dark, especially in the use of Panchromatic material. The enlargement of the pupil, which is always black, must necessarily decrease the color area of the iris. A few minutes spent on a check-up will be well

invested. Let a sitter look out from an ordinary window. The pupil will be about  $\frac{1}{8}$ " diameter. This leaves about  $\frac{5}{16}$ " of color diameter or a ring of  $\frac{5}{32}$ ". But let the sitter face the camera in an ordinary room lighted only with a 500-watt lamp INSIDE a flashbag, and pupil will be about  $\frac{1}{4}$ " diameter, leaving but  $\frac{3}{16}$ " of color diameter—a ring of  $\frac{3}{32}$ ". With a 500-watt lamp suspended on the front and OUTSIDE of the flashbag,—using the mirror reflector in both instances,—the pupil will be about  $\frac{3}{16}$ " scant, diameter, leaving, therefore, a color ring of  $\frac{1}{8}$ ", which, in my judgment, is approximately the most pleasing point of dilation. The color ring may be further enlarged, of course, by using a more powerful pre-exposure illuminant, but in the doing of this one is approaching that condition of illumination somewhat uncomfortable for the sitter. It would seem that any artificial light pre-exposure condition must be more intense than daylight to bring the pupil down to the same size. Herein, my daylight method for auxiliary illumination scores its biggest point, but since the auxiliary light coming from the mirror is always constant, whilst daylight is not, and since the pupil of the eyes are not too large when not less than a 500-watt lamp is used—undiffused—for pre-exposure, which, with the mirror represents a double influence on the eyes, as well as the influence of white front of the flashbag, I get more satisfactory results from this procedure than any other method, and whilst I realize many would prefer to be able to read diffusion or



Figure 4

key, as well as direction, of the flashlight to follow—which the illuminant on the inside of flashbag enables one to do—this is really of so little importance as one progresses with the Flashlight, whilst that of the eyes is of very positive importance.

### WHERE TO PLACE THE LIGHT

As recent as the last few days an old-time photographer was telling me of the occasion when he was a student in the school of photography of that pioneer flashlight workman, the late Fitz Guerin. This photographer asked Mr. Guerin what one thing he (the student) needed the most to learn. "How to read light" was the answer. This, I fear, is a shortcoming of a good many photographers. But to my mind, before the student devotes much thought to this fault, should he not first learn "What to strive for", for how can he proceed to make something unless he knows what he wants to make?

A man wrote me a few months ago from a central city asking how large a light source one should have to properly illuminate a bust figure. He was referring to the Flashlight. How many photographers have thought of that phase of lighting? I think it's important. I expected to answer him through CAMERA CRAFT long ago, but here it is: I don't know. However, I am very certain that most photographers would very materially improve their work if they would also materially decrease the size of their illumination. In any city in any part of this country one will find plenty of evidence in the inspecting of photographers' show cases,—that too large a light source is in use. The light commencing on the nose running across the face half way up the cheek and including the light ear in about equal tone, is ample evidence that the light source is en-

*Figure 5*

tirely too large. Then on the shadow side,—and it often is a shadow side, in all truth—the white reflector has been brought up on the extreme side, and if he fails to kill the only natural modelling of the face left, the retoucher helps him out, with the result that a round head is depicted as a disc instead of a sphere.

Rembrandt, they tell me, had nothing but a very small window with which to light his sitters. We have accepted him as our standard on lighting. His pictures had none of the troubles just mentioned. It is not hard to find the reason for some of the atrocious lightings photographers often make. Maybe the desire for shortest possible exposures is responsible. To light the human head, a sphere of roughly 8 or 9" diameter with a large flood of light is not conducive to reproducing it as a sphere, photographically. If one will reduce that source to such proportions or remove the sitter sufficiently far from a large source to such extent that one can readily see all the elevations and depressions of the features in marked relief, with one eye closed—the camera has only one eye—with the most pronounced light along the nose with other lights reflected from various facial prominences, lowering in tone as one scrutinizes the extreme sides of the face and ears, then some approach has been made toward the securing of the light effects Rembrandt put in his portraits. But Rembrandt was not limited to the extent of photographers in that he had color which we have not, with which we gave a meaning to the heavy shadows so small a light source must have created. But we





*Figure 6 and Alternatives*

photographers have reflectors to illuminate these same shadows with which we can bring out all the detail photographically that Rembrandt placed with his pigments, if we know how to do what Guerin said my friend could not do—"How to read light". I am offering two examples of bust figure lighting, Illustrations Numbers 4 and 5, as something approaching what I believe teacher Rembrandt would give me a passing grade on. I'd expect at least a B marking, that's 80 to 90 out of a possible hundred, and that wouldn't be the lowest Rembrandt grading if everybody submitted to the test.

These two bust figures were made with my usual two-grain powder charge Flashmachine at 8 feet distance, well forward, not too high, no screens (they are unnecessary if the light source is correctly placed and not too large). Reflector, a mirror, about 12" x 18" on light stand quite close to camera on the opposite side from the light—in the case of plain lighting only—and angled so as to throw forward a full reflection of the flash. If Rembrandt were back here I verily believe that's about the way he'd make his photographs, that's the reason I'm trying to make pictures that way. Of course, he wouldn't consider using anything but the Flashlight for his illuminant, for the reason that nothing else would enable him to make Rembrandt lightings without unusually long exposures, and no photographer can build a reputation that way owing to the later day exacting demand for naturalness and "action." May I call attention to the profile lighting. Even had the face been turned a little further from the light, as it should have been, there would have been no further difficulty in securing the shadow detail with the aid of the mirror.

The light source and the sitter remain, the camera moves and the mirror follows it just like a colt follows a mare. It's as simple as heck, when one gets right down to it. With the Flashlight all exposures are instantaneous, so that the matter of "How long shall I give" does not concern the operator at that time when his mind is fully occupied with other important things. The line lighting and so-called Rembrandt light-

ings have always been difficult to get balanced with the ordinary type of reflector. With the mirror, they are just as easy as anything else. Illustrations 4 and 5, Panchromatic films, unretouched, 2 grains Victor powder mixture (2 parts Soft and one part Normal). Dallmeyer 2A lens at f5.6. Flashlight front area about 4 feet square at 8 feet distance.

The use of the Instantaneous Shutter in connection with the Flashlight did not commence with my efforts to find a practical way for the use of a slow-burning powder for portrait use. It goes back a year or two earlier, when I first became quite interested in finding a means of including beautiful window effects, both of draperies and exterior views as parts of my backgrounds. Ordinarily, these very light background effects were "burned up" and quite disappointing. I also wanted to find a method of utilizing the direct light of the sun, when not too high, as a rear light, and to get away from the darker and sombre background effects of the more interior home surroundings for my young sitters—youth doesn't belong midst dark surroundings. I could think of nothing else that had any appearance of being practical but a change from my rapid "bulb" exposures to the instantaneous. With Victor NORMAL powder and a  $2\frac{1}{2}$ " Packard shutter,—as I was then using,—I found that an adjustment of my electrical switch that gave me contact when the leaves of the shutter were about one-third open allowed the quick Normal powder to get in its full action before the shutter was closed, and thus the strong rear illumination and window detail was preserved and kept within the range of my printing medium. I was a little apprehensive about the hazarding of prospective valuable sittings in this way for a time, but I found that this procedure was quite practical and at this moment I have no recollection of ever losing a negative from lack of synchronism. This adjustment, however, had to be changed for the slower powders, or mixtures, otherwise the shutter would be closed before the flash had gotten a fair start. This adjustment has been explained.

Illustration 6 represents a combination of frontal flash with rear direct sunlight and exterior detail as just described. No. 7 was made with two flashes operated as a unit, daylight being excluded.

### PRE-EXPOSURE ILLUMINATION

Not less than a 500-watt lamp is recommended for this purpose, not alone for focussing purposes—a "glycerinized" focussing glass is also quite a help for old eyes—but to create that condition of constant illumination in order that the sitter's eyes may be normal, and not have that "flashlight effect". The sitter should never be looking into darkness. This, or an even more powerful lamp may be placed immediately in front of the flashbag and in line with the direction the later flash will take. It has no apparent actinic action, especially when the instantaneous shutter is used and when used on the outside of and in front of the flashbag, the direction the later flash will take can be readily seen by the very definite shadows such a lamp will make. However, since most photographers

prefer to be in a position to not only read direction but key, or diffusion, it is probably better to use this pre-exposure illuminant in the interior. The latter is almost imperative when using the mirror as the reflector, a substitution I cannot too strongly urge, because of the easy facility it offers the photographer to quickly balance any lighting he may want, from the extremes of a plain lighting to the opposite,—the linelighting,—the mere movement of the mirror backwards or forwards immediately close to the lens on one side or the other making it possible to get a balance to satisfy the various tastes as to what each individual may consider a balanced lighting.

### PANCHROMATIC FILMS WITH THE FLASHLIGHT

I do not undertake to say that it is not practical to use the Panchromatic films with other illuminants than the flash, but I do know that their use with it is a giant step forward, not only in that they reduce the need for retouching from 50% to 75% or more because of their virtue in seeing the flesh colors with greater fidelity to the natural vision than ordinary emulsions, which, incidentally, makes them really faster than ordinary emulsions and for which proper allowance must be made in determining the flashlight charge, but that retouching that you buy in these films at but a dollar or two more per case is of a quality far beyond that of the most skilled retoucher. The submitting of proofs from such negatives makes, under the most unfavorable conditions, a better presentation to the beholder without proof retouching, than ordinary emulsions can yield, with it, not to mention its bearing on "that retouching problem" during the busy holiday season. The difference in cost for the very positive gain, is a bargain such that I cannot afford to pass up. The change from the red to the green developing light may be a sort of bugbear to some, but that's about all it can be, and since the green is equally suitable for the development of ordinary emulsions, and it certainly is less irritating during a long spell in the darkroom, I have gently and affectionately placed my old faithful red lamp on a nice piece of cotton in a bromide box for a long-earned rest.

### WHAT THE KODAK HAS TAUGHT THE PROFESSIONAL PHOTOGRAPHER

I recall reading a story in CAMERA CRAFT many years ago by a photographer whose neighbor called him over one summer's eve as they were both mowing their lawns. Said the neighbor, "I want you to see these wonderful kodak pictures of my baby," as he drew them from his pocket. "Ain't they great," beamingly. "Best pictures we ever had of the little rascal," unmindful that this same piece of juvenility had been a sitter of this photographer. The photographer thought they were "rotten". They were full of action, and cute, and all that, to be sure, but in that strong, direct sunlight, and chalky whites and dense shadows, "how could they be good?"



*Figure 7**Figure 8**Figure 9*

What photographer hasn't heard this same story in some other phrasing, yet there are still some who haven't got the moral. The public is no longer satisfied with wooden pictures, even though they be otherwise technically perfect. The Flashlight, I frequently explain to my customers, combines the possibilities of that appealing naturalness, the action, the grace, the "cuteness" of the out-of-door snapshot with the possibilities of technical excellence of the professional product, limited only by the ability of the one who makes it, to a degree unattainable—in an every-day sense—by an other illuminant.

### REFLECTED LIGHT

By which is meant that auxiliary light almost always necessary as an adjunct to the light of first source to bring within the capacity of the plate or film and the later printing medium, that range of light and shade necessary to photographically reproduce an object having three dimensions and appear as such in the highest degree. This is virtually all the photographer has to strive for from the purely technical angle. The small first source of light is the beginning or first step, whether the illuminant be flashlight or any other, but the small source light begets heavy shadows and these shadows must register detail in the negative. The correct illuminating of these shadows, to my mind, calls for greater care and skill than the first source lighting. This should be done from as near the point of view of the lens as possible, and NOT at the side of the sitter. This problem is greatly simplified when there is no need for variations of exposures, as is the case with the Flashlight, and especially so when used in conjunction with a synchronized Instantaneous shutter of dependable uniformity, and a secondary or "reflected" light not limited by the intensity of the light of first source. However, my favorite method is the mirror, because of its simplicity, occupying small space and great effectiveness. This has been fully described, but it occurred to me some might be interested in the other three methods I have used and for

## CAMERA CRAFT

that reason I will explain them, all of which have some commendable feature. Illustration was made with the flashlight in the usual position with another one about as far in the rear of the camera as the sitter is in front of it, using a similar powder charge. The distant light was adjusted to some just over the top of the camera. This leaves all floor space between sitter and camera available for entertaining the sitter. (No small advantage). Another, a 40" wide reflector of White Holland, 6' long, kept clean and smooth and stretched on a light stand advanced about two feet at the bottom and stood in an angling position close to the lens on opposite side from Flashlight, just a little forward of lens in some cases, and catching the fullest reflection from the primary light. This position does not kill the contour of the shadow side of the face. Illustration 1 was thus made. Another, is the utilizing of a well-lighted window immediately behind the camera, of a strength of illumination that with such light only and using the instantaneous shutter, a negative of about half normal printing density will be secured. The principle, it will be seen, of each of the four methods for securing the auxiliary light is identical. ALL from the front, or viewpoint of the lens, hence, no matter in what direction the head may be turned, all shadows are illuminated. Illustration 9, made with the frontal window auxiliary light, the Flashlight a little to the right. I would emphasize the importance of making certain that the auxiliary light is kept within its own sphere, it must be as the pianist to the singer. What is intended for a solo must not be allowed to develop into a duet. The appreciation of these differences between the work for the primary and secondary illuminants in their various details of direction and intensity means the difference between success and failure.

### A MIRACLE

Alice Frost Lord

*WHO would believe that Beauty  
Like some elf or sprite from fairyland,  
Could lurk about a bit of glass,  
Steal in and out of winking shutters  
And paint an artist's study on a film!*

*Who would believe that Love,  
Revealing God in myriad forms  
Of heavenly, earthly loveliness,  
Could find the compass of a box  
No larger than a book!*

*Who would believe that Truth,  
Writ in sky and cloud and flower-fancy,  
In curling wave and sunlit beach,  
Could find a home in steel  
And leather trappings—camera-wise!*

*Are these not miracles of prosaic days,  
Wrested out of storm and stress of living,  
Spun-gold tokens of transient moments  
When Soul hath made one listen to Itself  
Above the din of money-getting!*

# "Along the Trail of '98"

Cine Reeling in Alaska—Yukon With a Side Trip to Jasper Park, Alberta

By C. T. Kirkby

Illustrated by the Author



On the 18th of June I left San Francisco with my two cameras and outfit and headed for the North on a two weeks' vacation tour of Alaska, endeavoring to crowd as many movie "shots" into the time allotted as possible, and will endeavor to tell the readers of "Camera Craft" all about it. They may, some day, take the wonderful vacation.

I packed my two hundred foot Universal camera and my hundred foot DeVry camera with twenty-seven hundred feet of film and tripods, and sent them a day ahead to Vancouver, British Columbia. On arriving, one has to make a tourist's declaration before the Canadian customs authorities, paying the duty on the estimated value of the outfit; his permit is good for sixty days and upon departure from Canada the amount of duty is refunded. Now, in case you have exposed some of this film (negative) in Canada, when you return to the United States you are taxed a duty of two cents per foot. This does not apply, however, to film exposed in Alaska, which is American territory.

The trip up the Inside Passage to Skagway is very beautiful and telephoto shots at mountains and glaciers along the way are necessary. The beautiful Taku Glacier, near Juneau, is a wonderful "shot" to take from the bridge of the steamer (with a captain's permission), and another is the Mendenhall Glacier, a few miles out of Juneau, Alaska. I took this last at 8:30 p. m. at night, or I should say twilight, as the light is long in the sky in the far north through the summer. I used my Dallmeyer f:1.9, 3 inch.

After leaving Juneau we reached Skagway the next morning and soon after were on our way over the White Pass and Yukon Railroad to Carcross, Yukon Territory. I took "shots" from the rear of the train, along the trail of '98, the Pitchfork Falls, and the summit of White Pass where again we crossed from American to Canadian territory and the Yukon. After the preliminary regulations had been passed we were on our way again, traversing Lake Bennett for many miles, finally stopping at Carcross (abbreviation for Caribou Crossing), where the steamer Tutshi was waiting to take us down Fogish Lake to Ben My Chree, a trip that is certainly worth while. I took many "shots" along this interesting route. A short stay here and our steamer retraced her path to Carcross, where I took the south bound train back to Skagway and disembarking at Prince Rupert, B. C., took the Canadian National Railway's train for Jasper Park, Alberta.



## CAMERA CRAFT

This is one of the wonder spots of the world for an amateur cinematographer. Scenery and wild animal life are all there for you to get. I took many feet of film along the way to the park, the famous Buckley Gate across the Skeene River; also of Mt. Robson and the Indian Village with its Totem poles at Kitiwanga. In the Jasper Park region there is the famous Mt. Edith Cavell and the Ghost Glacier and Punchbowl Falls. The Maligne Canyon drive is a miniature Grand Canyon and the wild life abound everywhere. I took shots of mountain sheep from the roadside, 100 feet away, and bears were easily approached, but be careful in taking pictures of cubs. Do not get between the mother bear and her young. I found this out for myself and it nearly caused me heart failure when, in taking a "shot" of a cub, up in a tree asleep, I happened to turn around and saw the mother bear coming towards me. I grabbed camera, tripod, etc., and beat a hasty retreat.

My equipment on this trip was as follows: One 200 ft. Universal camera and tripod, and a DeVry camera. Lenses used were Goerz, 6 in. Telestar; Dallmeyer 1½ in. and 2 in. f:2.9 and Dallmeyer 3 in. f:2.9. One needs fast lenses and filters in the high altitudes and a Cino-phot exposure meter. After spending two days in the park the homeward way began via Vancouver and Seattle to San Francisco, arriving July 4, just two weeks and a day, thus ending a pleasing and lasting impression of "Along the Trail of '98." It took months to make this trip by the pioneers, who toiled and suffered, where we now go pleasuring.

The equipment mentioned happened to be my choice and my possession. What you have and are accustomed to using will serve as well, perhaps better. My advice is not to stint in cameras, lenses and filters, certainly not in film footage. You will have gone a long way. Get it all.



# Lecture Notes on Photography

By Professor Edwin A. Sperry  
Pei Yang University, Tientsin, China

Illustrated by the Author  
(Continued from February Issue)

Inasmuch as the eye is sensitive to one ray of light, the yellow for example, which is not the same as that to which the plate is sensitive, the blue for example, a lens which does not perfectly recombine the light will give a number of images at different distances from the lens having different colors and sizes, any attempt to focus the image according to the visual rays will leave the image by the actinic rays, out of focus and produce a blurred picture of the sensitive plate.

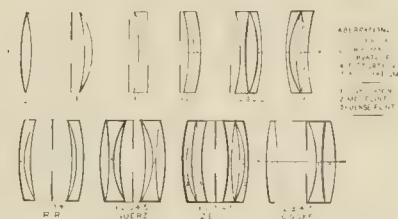
As has been intimated above, the two aberrations, spherical and chromatic, are corrected at the same time and by the same method. This can be easily understood when we note the similarity between the diagrams showing the paths of the rays to be corrected. This is usually accomplished by combining two elements in one system, one element of which consists of a double convex lens made of a crown glass of low density, the other a concave meniscus element of flint glass of high density having the concave surface on a similar curvature as that of one of the surfaces of the convex element, and the convex surface of the meniscus on such a curvature as will form a properly designed angle to the outer surface of the double convex element. The latter angle must be calculated for each particular kind of glass used. The angles of each of the elements will be in a reversed position to each other and in this way the double prism effect is obtained as described above, by which the beam of light is, at least, partially recomposed in such a manner as to bring those colors which are desired to be recomposed, in perfect harmony.

There is reason for saying that only certain portions of the beam of light will be recomposed. It is for this reason that we meet with still another difficulty and this is while the entire dispersion of the spectrum will be twice as great in the flint glass as in the crown glass prisms with equal angles, it has been found that each part of the spectrum is not similarly affected. That is to say, the various portions of the spectrum are not all increased in length in uniform proportions. The result of this is that in recomposing the rays, all colors will not be accurately restored and that there is not perfect recombination at all points.

The result of this "IRRATIONALITY" of the dispersion, as it is called, is that if the relations between the two prisms is so calculated as to perfectly recombine the colors near the ends, those in the central position will not be perfectly restored and vice versa. If the visual rays

## CAMERA CRAFT

are recomposed and not the actinic rays, we will have a clear visual image but the photographic image will be poor. The reverse of this is also true. There is a method by which this difficulty can be met and that is by selecting any two colors of the spectrum and so calculating the proportions of the two prisms that they will recombine these two colors perfectly while the other rays are disregarded. In usual practice the blue and the yellow rays are the ones selected and as these rays include both the visual and the actinic rays, any image focused on the ground glass will be the image which will be clearly impressed on the sensitive plate. Most of the other rays are invisible or nonactinic, to any great extent, so that they will have no great effect on the results. This is true in the use of the ordinary plate but in case the special plates are used which are made to be sensitive to the ultra violet rays, such as in kinds of research work, the lens must be so designed as to bring these rays into harmony with the visual rays for the same reasons. Lenses corrected in this manner are **ACHROMATIC**.

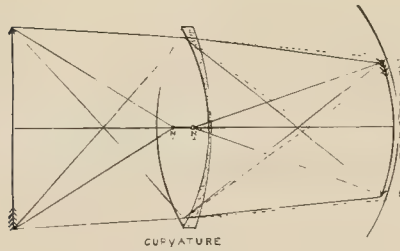


### *Curvature of the Field*

This is a defect which is inherent with all lenses and is due to the fact that as the focal length of the lens is fixed, the length of the rays as they diverge from the lens, are in the nature of radii of a sphere, the center of which is located at the optical center of the lens. As the outer termini of these rays generate a sphere, it will be clearly seen that the surface at which there would be a perfect focus will be curved in all directions and that it cannot be a flat plane. The length of these radii is called the **EQUIVALENT FOCUS** of the lens and is that which is generated by rays which enter the lens in parallel lines, or coming from an object which is at a sufficient distance from it to bring the rays to the lens practically if not actually parallel.

From the above it can be seen that in projecting the image onto a flat surface, as in the case of a ground glass or sensitive plate placed at a proper distance from the lens, it can only be in focus at the very center of the plate, or at the axial center, while the remaining portions are out of focus. As the plate is brought nearer and nearer to the lens the plate will cut the surface of the sphere at successively larger circles or rings, at which it will be in focus while the central point as well as the outer portions will be out of focus.





In designing lenses it has been found that, by the proper combination of positive and negative elements or, as it is sometimes expressed, by the use of properly calculated diverging or concave surfaces in elements having a higher refractivity than the converging elements, the marginal rays may be increased in their angular position with a lengthening of the focal distance so that the plane of focus is practically made flat. This third correction is usually calculated with the first two, spherical and achromatic corrections, but sometimes requires three, and sometimes four, elements in the system. In the cheaper grades of cameras in which the single meniscus lens is used, this correction is made by carefully locating the diaphragm which must have a small aperture, at a proper distance from the lens in front. This can be termed more properly as a mechanical rather than an optical correction inasmuch as the location of the diaphragm is such as to select certain portions of the pencils of light which will shift the image to practically a flat surface. While this does not make a perfect correction it does so so nearly that the results are very satisfactory. This, of course, will greatly decrease the illumination and make the lens correspondingly slow.

(To be continued)

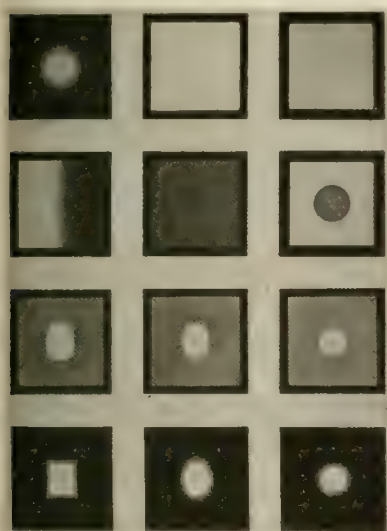
### NOTE TO THE READER

Are you keeping these articles handy? Do you follow them as you would a course of study? If you are, you are getting a liberal and practical course in photography. If not, you are missing something. Amateur and professional photographers are becoming convinced that their science and art is now accepted in schools and colleges as essential to esthetic and scientific training. We hope to strengthen that cause.

# Special Filters For Cinematography

By Geo. H. Scheibe

*Having wondered at certain novel effects in motion picture plays which we could not account for—such as fog atmospheric rendering of scenes where we knew no fog ever came—we inquired and were again and again told that Scheibe filters had been used. In the belief that our readers are interested in what is being offered, and apart from any commercial exploiting, we asked the maker to tell us the facts. Modestly enough he has abstained from emphasizing his merchandise and has confined himself to purely informative matter.—S. B.*



Reckoning in dollars and cents, the use of what is known as the "filter" in motion picture production has proved one of the biggest boons to the practical side of the motion picture industry; likewise the filter has served to greatly enhance the artistic possibilities of the cinema.

The filter is the outcome of experiments by specialists who have devised various forms of filters which have come into wide usage throughout the world.

It is seldom that an invention can be appraised in both practical and artistic terms, but the filter, it seems, falls in both categories. The application is simple enough, it being placed before the lens and giving results according to the composition of the particular one being used. Before the lens it is very often the direct means of saving time and money involved in traveling varying distances to special sections to obtain atmospheric effects, such as the typical London fog. A particular type of filter is used for fog effects. Such atmosphere is in continual production demand. The filter in this instance eliminates the necessity of waiting for fogs. The desired effects with the application of the fog filter may be obtained when the sun is shining its brightest. Investigation has revealed that in many ways the fog filter brings more satisfactory results than are possible in filming of real fog, especially at night. The most powerful lights do well if they are able to penetrate the real fog without showing the straight-cut searchlight effect that cannot be avoided.

Another type of filter with color graduation in various degrees, sometimes only one color, then again in two color combination, the upper half red and the lower half yellow, is used to produce night effects at any time of the day. Clouds are retained in their natural tone or can be overcorrected so that the scene will appear as though shot in moonlight.



*Without and With Night Effect Filter*

*George H. Scheibe*

Night effects are made with various grades of graduated filters, the color combination depending upon the desired effect. These filters turn the blue sky as dark as wanted and the scene appears as if made at night, though it may have been made at noon. This, of course, is possible only on panchromatic film.



*With Graduated Filter A-2-C*

*George H. Scheibe*



## CAMERA CRAFT



*With Fog Filter*

*George H. Scheibe*

Diffusion is also obtained with a filter which produces the same effect as a soft-focus lens, and does not alter the exposure.

Another filter, a saver of valuable time, material and money, is known as a monotone filter. It is used only for visual purposes. Through it you see color reduced to terms of black and white, revealing instantly what any subject or scene will look like on the screen or in a photograph.



*With Diffusion Screen*

*George H. Scheibe*

This filter precludes the necessity of making an actual photographic test, hence its value is evident.

Other types of filters called "Irises" are used in blending the edges of the picture in circular, oval and square effects, sometimes with black edging and again in white.

With the increasing popularity of the amateur motion picture camera, the Amateur will soon follow the footsteps of his big brother, the professional cinematographer, in producing his many tricks.

8 8

## Intensification

Prof. Dr. H. D'Arcy Power, M.D., F.R.P.S.

Were I asked what photographic subjects had been written to death I should be inclined to place bromide toning first, and intensification second, and yet I am entering the field with one more paper, and for this reason: nearly all talks on this subject deal with individual processes or personal experiences. This is all right, but there is also needed some ordered thought on the ends to be met and the ability of the very many intensification processes to supply them and further the question as to how far the results are reliable and uncomplicated.

The first disideratum of a negative intensification process is that it shall be lasting and not, at the time of its making or later, mar or alter the photographic image. The processes which are most in use are liable to do both. These are first, the varieties of mercurial intensification, and those of copper, and uranium; on this ground they will be excluded from consideration. All forms of mercury are liable to change in time; in the hands of a few workers the liability may be very small but take the rank and file of workers and go over their mercury intensified negatives after a few months or years of storage and the number stained and altered is distressing. The copper intensifier is safer, but it gives rise to pin holes, and a coarsened image. Uranium is still worse. As we have simple processes that are void of these possibilities it is folly to use the doubtful ones.

One other process we may leave out of consideration, not because of these disadvantages, for it is one of the best, but because in daily practice it is too troublesome and expensive to use. I refer to silver intensification. I have had a good deal of experience with it in the case of autochromes, and am convinced that for these plates other intensifiers are inferior, and that is still the opinion of the Lumieres, although we now find other intensifiers taking its place in practice.

Disregarding the above we have left for consideration the following methods:

1. Changing the image into a sulphide, to which I recently drew attention.
2. Toning with gold.
3. Toning with lead.
4. Toning with chromium, the standard process.
5. Toning with sulphide of gold.
6. Toning with analine dyes.

Each of these processes has individual merits and applications concerning which I shall say a few words. A process may allow of only one grade of intensification, which is attained at once and cannot be controlled or increased. This is the case with the sulphide toning, and with the gold, and in practice it is largely so with the chromium process. The sulphide of gold toning allows a steady increase of deposit, and the pigment intensifications permit both of a steady increase of tone, but also a control of the scale of graduation.

It is a prerequisite in any intensification or reduction process that we deal with a pure silver image, containing neither unfixed silver or traces of developer or fixing bath. When there is the least doubt of this the negative or print should be refixed and most thoroughly washed. It is a good rule to follow in all cases. Let us now briefly consider each of these processes.

## *Sulphide toning*

The advantages of this method are that it gives a moderate but very useful degree of intensification, secondly renders the negative image practically indestructible, and does not alter the scale of graduation. The printing quality of the negative seems to be improved. So far as I know attention was first drawn to it by myself in *Camera Craft* and the *British Journal of Photography* of this year. It is extremely simple. Immerse the negative in the ferricyanide and bromide of potassium bleaching solution, as in sepia prints, and transfer to a two per cent solution of sodium sulphide, taking care that it is left sufficiently long to completely combine with the silver, wash and dry. It is important in this case, as with prints, that the sulphide solution be not old. The result is seen in illustration 1.

## *Gold sulphide intensification*

The sulphide toned negative just described is the basis of this process which consists in placing such a negative in the standard sulphocyanide gold bath, and removing and washing it when the desired density has been attained. In this way the moderate intensification of the silver sulphide can be built up into a very strong image. As this takes place slowly there is no difficulty in watching and determining the result. The deposit is fine, and does not blur the fine details, it maintains normal graduation and is absolutely unalterable. The deposit



consists of a mixed sulphide of gold and silver, which by reason of its strong yellowish-red color has excellent printing qualities. This process like the preceding is the result of my experiments in the search for unalterable negatives, and published with the preceding process.

### *Gold toning*

A negative toned in the sulphocyanide gold bath is slightly intensified.

### *Lead intensification*

The great amount of intensification yielded by this method makes it valuable for line work, but too contrasty for other forms of printing. The formula is: Lead nitrate 400 grains, Pot. ferricyanide 600 grains, Acetic acid 3 drams, water to 20 oz. Bleach in this wash carefully in 10 nitric acid, then in water and blacken in a 5 solution of sodium sulphide. Bleaching solution keeps in the dark.

### *The chromium intensifier*

It is many years since Welbourne Piper brought this into notice; slowly at first but always more and more it has become the favorite, and for good reasons. It is simple in operation, gives a very good but not excessive intensification, the color of the deposit is a true black, it is not granular, and suffers no change with time, lastly the process may be repeated with increase of density. This is true but my experience does not recommend it. I have found change of graduation and clogging of details result. When trouble arises with this intensifier it is the fault of the worker, not the process. It is all a question of fixation and washing. If spots of undissolved silver salts are left in the plate, or similar areas of hypo from bad washing or if after bleaching the last traces of bichromate are not removed then these areas will be marked by weakened intensification. It is all a matter of simple care such as any negative ought to have whether receiving after-treatment or not. The simplest way of working is to keep a jar containing an excess of crystals of Potassium bichromate in cold water; this will remain saturated at 10 per cent. From this stock solution one part in five of water will give a good working mixture to which a few drops of strong hydrochloric acid are added from time to time as the bleach becomes too weak to quickly bleach the negative when it is immersed therein. This must be followed by washing until every trace yellow color is discharged from the gelatine, a process which can be greatly made more secure if the plate is immersed for a few minutes in a bath of a 5 per cent solution of either bisulphite of soda or the meta-bisulphite of sod. or potass. Too much light on the plate after bleaching is not desirable. When washed immerse in an amidol developer, and if the maximum of density is required leave it therein for at least 15 minutes; an unexpected increase is thus usually obtained. During re-development full lighting is desirable, and if other developer than amidol is employed it becomes a necessity. I have not given here the usual fixed proportions of acid and bichromate for the reason that with every plate

developed in the bath, they are altered. The only thing to bear in mind is not to use a bath stronger than one in five of the bichromate stock solution, and that the more acid you add to this the slighter will be the intensification. Such a 2 per cent bath will retain enough bichromate to work for a long time, but there is neither labor nor expense in making up a fresh one as often as necessary. Attending to these little points it is the cheapest, safest and most generally satisfactory of intensification processes. When applied to prints it turns a poor colored bromide or gaslight picture into one of good, though a little cold, black. One final warning: hypo is the arch enemy, and the bleached prints must on no account be washed along with others from the fixing bath; equally I strongly demur to the statement found in some books that it is not needful to fully wash negatives or prints free of hypo when they are to be thus intensified.

### *Intensification with dyes*

The whole or part of the silver of a photographic image can be replaced by a dye; as this increases the size of the molecules it involves an intensification of the image. Secondly, the amount of this intensification can be determined by the length of time the dye is allowed to be absorbed. Thirdly, the color of the dye used will have a great influence on the graduation of the negative, for example, a blue image will print softly, whereas a red one will give a maximum of contrast. Fourthly, if too much dye has been absorbed it can be reduced by bathing the plate in a weak solution of potassium permanganate acidulated with sulphuric acid, and in so doing the lightest parts will be most attacked and the final negative have increased contrasts, whereas if the dyeing be stopped short of completion the opposite result will occur and the contrasts be reduced. It is thus evident that we have here a very powerful, and at the same time pliable, method of determining the nature of a negative. I know of but two disadvantages attaching to this method: it requires more attention and time than the others, and if the negatives are left about in the light it is to be expected that the analine dyes would ultimately be affected. So far as the last is concerned I made my first experiments in this direction fifteen years ago, and I have today negatives consisting of methylene blue, Malachite green, and Fuchsin that are as good and unchanged as when first made. Any of the ways that have been published for making lantern slides in analine colors can be used for negatives. Last year Lumiere and Seyewitz published a formula (reproduced in Camera Craft) whereby the image was rendered in black, but the dyes recommended I have found difficult to obtain. The method I devised and used many years ago is very simple; the usual ferricyanide bromide bleach used in sepia toning is made up with potassium iodide replacing the bromide salt in this mixture. In this the negative is fully bleached and well washed, and then dyed with a not too strong solution of the required dye, acidulated with 1 per cent of acetic acid. The depth of

color can be adapted to the requirements of the worker, and if it be insufficient can be later continued to the full absorption point. When this full pigmenting is not employed a very little washing is sufficient to free the gelatine from staining, especially with the color I have found useful, namely: methylene blue for a soft printing negative, that is to say one in which the original silver deposit would have produced a too contrasty print. Malachite green gives a negative with about the same printing qualities as the undyed black silver image and its only advantage is the graded intensification that can be produced. Rosaniline and Fuchsin give very clean and hard printing negatives. I have found them very useful when working with an original ghost like negative. All in all I think that dye image negatives will be found very useful for special cases.

The above are the intensification processes that I hold to be safe, reliable, and capable of giving definite results. It is right for you to ask me: "To what extent do you use them yourself?" This is my answer: If after fixing a negative and examining it in daylight it has the quality and density I require, I leave it alone. If it is an important negative and rather under than over the normal density, I pass it through a 5 per cent formaline bath (all negatives would be better for this), bleach, and sulphide it. It will now neither change nor scratch, and if later I want a greater density I have only to place it in the sulphocyanide gold bath to obtain it. Average negatives that are markedly too thin receive chromium intensification, and this means most thin negatives. Lastly, if not as infrequently occurs, I have a badly graded negative of a good subject, I resort to the dye replacement process of control. I have stated my reasons for rejecting the mercurial intensifiers, of which, in my earlier years I had ample experience. So far as the latter is concerned I have to my credit forty years of continuous practice that has not failed to take notice of the latest thing.

## AN ADIEU

James Courtney Challiss

*No more for me the city! I have seen  
The countryside flushed with the flaming dawn;  
I've seen a drowsy yellow cow lie on  
The morning hills, upon a rug of green.  
I've felt the pure, dew-freshened air come o'er  
The waking fields—God's breath inviolate,  
And watched the silver mist, with lazy gait,  
Crawl phantomlike across the meadow-floor.*

*I've heard the dawn-winds rustling in the corn,  
Singing their songs of silk and tassel time;  
The lark's clear notes which like a silver chime  
Re-echoed in the aerial arch of morn.  
But best—within the beauty of the whole  
I've quaffed the quietude that lifts the soul.*



CAMERA CRAFT



FIRST AWARD, *Pictorial*

*H. S. Kaito*

Japanese Camera Club of San Francisco

# CAMERA CRAFT



Second

MARCH  
ADVANCED



Fourth



Third



Fifth



SECOND: *Franz Pfennigbauer*  
FOURTH: *Dr. Max Thorek*

THIRD: *Baroness Marianne Chiari*  
FIFTH: *J. C. Youenes*

## MARCH 1928 COMPETITION

### Advanced Pictorial

Peter Agenfeld  
Andre Andresen  
Henry Berger  
Fred. Bettincurt  
P. L. Bouchon  
Baroness Marianne Chiari  
Miss Elise Deming  
Dr. A. F. Dutton  
O. Egrisen  
Lo Chu Fong

Miss M. Fressel  
Otto Ganz  
M. Groaty  
I. Hackenbeck  
M. A. Hill  
O. Ikuta  
H. S. Kaito  
Dr. K. Koike  
O. Kuranshi  
K. Lortsing

Ig. Mannerhem  
Dr. F. Nutter  
M. A. Obremski  
A. Patton  
H. F. Peters  
Franz Pfennigbauer  
Dr. R. R. Scobey  
Dr. Max Thorek  
M. Van Orten  
J. C. Youenes

## CAMERA CRAFT



FIRST AWARD, *Amateur*

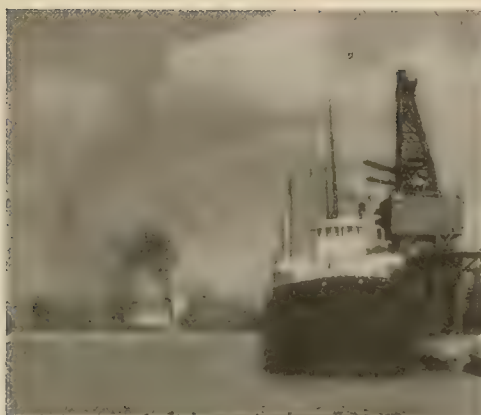
*A. S. Mac Farlane*

### NOTICE TO COMPETITORS

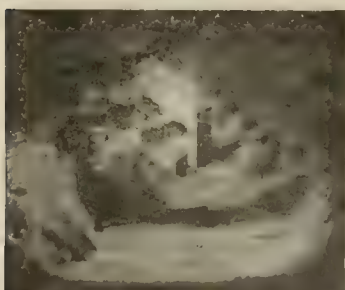
If you are affiliated with a club be sure to put your club name on the back of the prints, as well as your own name and address. The Silver Cup at the end of the year goes to the CLUB the members of which have achieved the most awards in our competition. Only the CASH PRIZES go to individuals. To be explicit the winners are credited to a club only when membership is noted on the print submitted.



# CAMERA CRAFT



March  
Amateur



Fourth



SECOND: *Louis R. Murray*

FOURTH: *W. A. Watson*

THIRD: *T. K. Tsukane*

FIFTH: *C. E. Lamphere*

## MARCH 1928 COMPETITION

### Amateur Pictorial

O. Aamoldsen  
H. Andersen  
Briccio C. Baulish  
J. H. Becker  
G. B. Blaisdell  
E. J. Brown  
Mrs. Bruce Burns  
A. W. Clark  
J. D. Conklin  
Franz Coogel  
H. Dennison  
Mrs. W. F. Eldridge  
Dr. T. Everson  
H. P. Ferris  
Mrs. S. P. Fream  
Z. Freitas

Robert Gane  
Miss Winifred Graham  
Mrs. M. Hammett  
Dr. James Inman  
Atwood James  
Mrs. F. Jameson  
Albert Jennings  
Henry Junker  
H. Kessler  
Arthur H. Koors  
C. E. Lamphere  
C. G. Lundin  
A. S. MacFarlane  
J. D. McCauley  
M. Martinson  
J. C. Moddijonge

Miss Avanelle Moore  
Louis R. Murray  
Ig. Neiman  
Miss S. Nevers  
Howard Niblack  
T. Noguchi  
F. L. Owen  
E. W. Porter  
S. B. Priest  
Guy G. Russell  
K. Shimizu  
Tulsi Ram Sood  
T. Tsukane  
William Vestall  
W. A. Watson  
T. M. Waumsley



### The Walrus

Under this unique title W. L. F. Wastell has brought smiles to thousands with his regular contributions to The Amateur Photographer, that splendid British photographic weekly. His heading, Piffle, was a feature of the publication and remains an institution.

This, anent the announcement he has made that, with the rounding out of the twenty-fifth year as The Walrus and of Piffle, he ceases both, and shall write less regularly and under his proper name. That assurance is some consolation, for we shall miss the particular oddity of nom-de-plume and even the same humor will seem to call for designation as Piffle.

Do not think for a moment the matter was piffle. Wastell never said anything to intentionally hurt or "kidded" for the mere purpose of being funny. There was a serious meaning back of his humor and his sport was helpful.

As we write this his portrait is before us. A benignant face, a very human outlook, and fine head, and eyes that betray the humorist. And, the touch of kinship—the well smoked pipe on the table. God bless the man. He had us looking for each next issue and sent us about the day's work with a smile.

Over the intervening miles of continent and heaving sea, greetings, kindly writer, and may Fate grant you two-quarter centuries more of enjoyment of your pipe, of strength to the elbow that swings the pen, and us the joy of finding your personality projected to all parts of the world where the English language is read.

### STRIVING

Sigismund Blumann

*THE soul of me would soar to where Orion swings  
But for the heavy feet that cling to earth.  
The music in me throbs to godly rhythm, sings  
But to itself at best. There is a dearth  
Of voice to pleasure other ears, of wings to fly  
To the empyrean heights where I would soar.  
Still shall I utter sounds, still shall I try  
And till the death of me try still forevermore.*

### REGARDING OUR SERIALS

This issue is so crowded with current events that brook no postponing that we thought well to omit Professor Hackh's installment for the month. We assure the reader, however, that it shall appear in April. We may alternate the Hackh and Sperry series in the future. The interest both have aroused makes us reluctant to do this but we are fairly bursting with good things for our Camera Craft friends and many of them call for prompt appearance. Importunate letters are coming in every week for Southworth's article on Hypersensitizing Carbon Tissue. The plan outlined will enable us to run that and similar subjects with our complete courses in photographic training.



## Association News

ALVA C. TOWNSEND, Lincoln, Nebraska, *President*  
 CHAS. AYLET, Toronto, Canada, *1st Vice-president*  
 D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*  
 JOHN R. SNOW, Mankato, Minnesota, *Treasurer*  
 J. W. SCOTT, Baltimore, Maryland, *Chairman Commercial Section*  
 PAUL TRUE, New York City, *Chairman Manufacturers Bureau*  
 L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*



H. L. COREY  
 Business Counsellor, P. A. of A.

### Convention News

Secretary Vinson had a meeting of the Louisville photographers on Thursday evening, October 27. At that time the work of the Forty-sixth annual convention was officially started. Every member of the Louisville club pledged that he would use his utmost endeavor to make this convention a success.

The following committees were appointed. It is expected that these committees will be added to within the next week or two.

Entertainment committee—J. Caufield, chairman; reception committee, J. C. Reiger, chairman; publicity committee, H. Hesse, chairman; exhibit committee, J. Berry, chairman; platform committee, J. Hoehlin, chairman; commercial section

committee, H. Hesse, chairman; information committee, J. L. Cusick, chairman; ladies' committee, Miss Bernice Scottow, chairman; banquet committee, A. L. Piers, chairman; registration committee, F. E. Gatchell, chairman; automobile committee, Miss Lena Heath, chairman.

Mr. F. E. Gatchell, who is the general chairman of the convention committee, has started work on advance registration which will be placed on sale shortly with the traveling men throughout the country. He expects confidently to very materially increase the advance sale of registration over last year, when over 550 registrations were sold before the doors of the convention were opened.

### More News

The Trustees of the Winona School met in Washington, Sunday, January 29th, at the office of Chairman George W. Harris with full attendance consisting of G. W. Harris, Felix Schanz of Indiana, Pirie MacDonald of New York, Secretary L. C. Vinson and Director Will Towles.

It was decided that the School should be held during the month of August.

It was decided that every effort should be made to secure permanent instructors in the dark room and finishing rooms and that everything possible that could be done should be done to impress upon the students the great importance of this department of photography, for the Trustees feel that it is of absolutely equal importance that the student should be as equally proficient in his knowledge of how to produce a perfect print as in the posing and lighting of the subject. It is hoped that in the course of a couple of weeks time the Trustees will be able to announce the instructors of these departments.





## Master Photo Finishers of America

A. E. Block, President.....27 Von Hillern St., Dorchester, Mass.  
Fred. Mayer, Vice-President.....Portland, Ore.  
Wm. J. Meuer, Treasurer.....212 State St., Madison, Wis.  
Guy A. Bingham, Executive Manager.....Box 1020, Rockford, Ill.

### Territorial Vice-Presidents

South-Western States: W. F. Honnen.....1240 S. Main St., Los Angeles, Calif.  
North-Western States: C. M. Coffey.....284 N. Commercial, Salem, Ore.  
Mid-Western States: Chas. W. Lynn.....3917 Orleans Ave., Sioux City, Iowa  
North-Central States: John H. Seamans.....7052 Jeffery Ave., Chicago, Ill.  
Central States: E. L. Hurlburt.....315 St. Louis St., Springfield, Mo.  
South-Central States: J. A. Hammond.....Box 650, Meridian, Miss.  
South-Eastern States: Elon C. Robison.....105 Third St., N., St. Petersburg, Fla.  
Great Lakes States: C. P. Phillips.....6930 Gratiot Ave., Detroit, Mich.  
Dominion of Canada: W. A. Taylor.....274 Carlton St., Winnipeg, Man., Can.  
Central Coast States: Wm. H. Eichner.....1210 "G" St., N.W., Washington, D.C.  
New Jersey—New York City: J. G. Taylor.....24 E. 23rd St., New York City  
New England States: H. K. Atkins.....Middleboro, Mass.  
Mid-Eastern States: M. J. Koch.....535 Penn Ave., Pittsburgh, Penn.

*"Remember the Day  
With Snap-Shots"*

### Guy Bingham's Tour

Our general manager and secretary has been swinging over the country in a long and wide arc and his course is marked by a wake of satisfaction and success. Wherever he has been the local shows a healthy increase in enthusiasm and loyalty if not also in numbers. Let his stop in San Francisco serve to illustrate.

The evening at the Hotel Whitcomb, when and where about ninety-five per cent of the finishers of Northern California gathered to meet him and do him the honors of his office, proved so potent an influence in bringing together men of different thoughts and feelings and gained so many new members that there is only one deduction to be made: it pays to keep Guy moving and in touch with the remoter and outlying districts.

Guy has a warm and friendly presence and the utter lack of egotism in his talk wins his audiences. He gave facts and figures to the gathering which showed what associations have done, can do, should do. Some there were who learned for the first time to clearly understand what is meant by gross and net. It did them good.

But the big thing, the nationally important thing that vitalized Bingham's address was that the Master Photo Finishers did not exist to raise prices, but to better conditions, to bring those prices up to a fair basis for the public, the middleman and the finisher. Moreover, to improve quality. The policy in relation to the public is to be Better Work from a Master Photo Finisher, in Return for a Fair and Honest Profit That Will Give the Help a Living Wage, a Good Job and Favorable Conditions Under Which to Produce Superior Finishing.

Somehow that policy goes well with our national flag. This is not just business. It is the ardent carrying on to establish American Labor, American Industry, American Trade, as something worthy in the world's estimate. To place the banner of the M. P. F. A. where it may float proudly as one more decoration on the ramparts of the nation's prosperity.

Mark well the lesson, take to heart the message your general manager and secretary carries with him and brings to you—better work. The imprint of the association to be a guarantee of honest service.

*"Remember the Day  
With Snap-Shots"*



## Pacific International Photographers' Association

Embracing Alaska, Alberta, Arizona, British Columbia, California, Hawaiian Is., Idaho, Montana, Nevada, Oregon, Utah, Washington.

**WILLIAM M. BALL, President; Corvallis, Oregon**



**Mabel Spencer, Third Vice-President**

Young, fair; unmarried—how she escaped the eligible gentlemen of the P. I. P. A. we cannot fathom. A pleasant lady, loyal to her friends and to her duties and from the start an enthusiastic association factor. Mabel is a busy woman, that is the element that explains her success. With her partner, Wanda Stolte (one of the beauties of our Alameda contingent), she conducts a portrait establishment in the neat little, sweet little town on the sand, where there is a hotel, an Elks building, and chief of police and chief of fire department gorgeous as admirals on parade. A home city with at least one family to each garage and an average of one child to the family.

In this environment Mabel and Wanda have built a business that is in ways an institution. When fond parents want to retain an image of their progeny as they are at best, they trek to Spencer and Stolte and in due time a real picture adorns the parlor walls. They still have parlors in Alameda, so you see it really is a home town.

Now, personality and attempted humor apart, Spencer and Stolte pictures interest the profession in that they succeed in proving that bread and butter work may be artistic, pictorial, what-you-will. Mabel studies her subjects, lights them, poses them

## CAMERA CRAFT

and prints them in just the one way that is best suited to type and temperament. She makes children look like children, not dolls—children ready to jump out of the frame and romp. The work that leaves the S. and S. establishment is right, is good, is finished. It is a likeness of the being, not the face. It is a picture.

You all probably know Mabel, anyway. But those of you who have not met her have a treat in store. Look her up when in these parts and by all means cultivate her at your next convention. She will enjoy meeting you and you have a pleasure coming to you.

### Our Very Own Official Organ

During the latter part of February appears the first copy, Volume I, Number 1, of P. I. P. A. Hi-Lites. This is to be the intimate, confidential, official organ of the association and a medium for close contact between the members and their officers, and between the members themselves, however remote and separated. President Ball is doing things.

Hi-Lites will be edited by Claude F. Palmer, chairman of the commercial division, Portland, Oregon. His portrait and interesting Hi-Lites on him will appear in a forthcoming issue.



Ye Editor Retaileth Newes of Ye Profession and in Quaint Italics Titillateth Ye Sphinx with Hys Quill

### Reginald C. Barker Is in Hollywood

Reginald C. Barker, whose "real western" WILD HORSE RANCH was one of the outstanding successes on the Page list last year, is spending the winter months in Hollywood. Before his literary talent asserted itself, Mr. Barker tramped considerably on life. He was born in England, drifted to America, worked as a logger in Maine and northern Minnesota, as a dock-hand in New York and as a deck-hand on a fruiter which took him to the Isthmus, which he crossed afoot. Six years ago, after punching cattle for a spell in Arizona and prospecting in the Colorado desert, he settled down in Boise, Idaho, and started to write. He is now established as one of our foremost writers of western stories. His new novel, which his publishers tell us is a gem of western fiction, will be published by Page in the early spring. The definite title has not yet been announced.

*When tempted to overcharge, consider honesty and the customer. When driven to the verge of underpricing, consider honesty and your creditors.*

### J. C. Shinkle in Business

To many in and out of the profession J. C. Shinkle is well and favorably known. He has severed his connection with the beautiful city of Woodland and, having bought the Halverson Studio in Colusa, will enjoy the beauties and advantages of that inland metropolette and give the people of the community an opportunity to enjoy the beauty of his work. Luck to him.

*You don't make yourself a bit bigger by tearing down a better man.*

### National Safety Council

In July of this year the National Safety Council, 108 East Ohio street, Chicago, Illinois will conduct a photographic competition, the prizes for which total \$200. The pictures must show something or incidents pertaining to the elimination of danger to life or serving as a warning against dangerous actions, conditions or practices. You stand a chance to gain money and help toward the safety of your fellows. Become active, or in the vernacular, get busy.



## E. A. LaBonte

It was raining pitchforks and the day was particularly gloomy till our friend and brother LaBonte came with his warm personality to cheer the time and place. He has recently suffered the greatest bereavement which can come to a man, the loss of his wife, but individual grief and his own sorrows are his cross and he carries it nobly. It was a welcome reunion and we hope to see our friend oftener.

## Tacoma Organizes

Onward and upward the cause is carried by the profession. Now Tacoma has shown the way. At a recent meeting of the photographers of that city it was decided to form, and there was forthwith formed, the Associated Portrait Photographers Association of Tacoma, and the following officers were elected: president, J. B. Holyer; vice-president, E. Peterson; secretary and treasurer, John Smith. Strength and prosperity to you, brothers.

## Middle Atlantic States Association

There will be in Philadelphia, April 15 to 18, a unique convention with many entirely new features.

Picture first 300 prints chosen for unusual merit and hung under the direction of experts. These prints will be mounted in uniform sizes, 8x10, 11x14, 16x20, and placed under glass with special lighting and will be in a beautiful gallery surrounding the foyer of the Benjamin Franklin Hotel, Philadelphia; an environment comparable to that of almost any art gallery.

To give time for examination and shading of these superb examples of photography in its various branches, there will be no afternoon sessions of the convention, and to bring home to all the practical side, still movies will be projected on a screen with criticism and analysis led by Mr. Yarnell Abbott of Philadelphia.

Other features of the program, published elsewhere, promise a feast of instruction, social entertainment, and inspiration of a most compelling character.

\$500.00 gold and \$600.00 solid silver cup are offered in prizes.

Entry blanks may be obtained from R. T. Dooner, Middle Atlantic States' Association, 1824 Chestnut street, Philadelphia, or from this paper.



Edited by H. D'ARCY POWER, M. D., F. R. P. S.

### The Technics and Pictorialism of Lantern-Slide Making

(Continued from February Issue)

I am not a chemist, and speak, therefore, with some diffidence, and what I am about to say is based entirely on observation and experience and cannot claim to be the result of scientific investigation.

It seems to me that there is a dual action; a chemical development and a physical development proceeding side by side. Their relative activities would appear to be determined partly by exposure, still

more by temperature, and partly by the extent to which the chemical development is affected by the restrainer; but what I feel we require to know more particularly is the part played by the ammonium salts in the matter.

As I understand Professor Svedberg's conclusions, as stated in the Hurter and Driffeld Memorial Lecture of 1922, the amount of exposure determines the number of the developable nuclei started in the silver grain by the action of light. The chemical developer can only act on these

nuclei which it transforms into metallic silver, and this action proceeds on lines that are familiar in practice, although I do not think that there is a general agreement on the theory of what takes place. At the same time the thiocarbamide is dissolving silver from the grains in the emulsion, but whether from the unaltered part of the grain, or from the light-affected nucleus, or from the developed metallic silver, I do not know. This action is apparently greatly influenced by temperature. I assume (I have to guess at these things until the chemists come to our assistance and explain them) that this colloidal silver is by some action of the developer deposited upon the nuclei that the chemical developer is transforming into metallic silver. The higher the temperature, the finer will be the silver deposit, the quicker the action, and the warmer the color. This statement needs qualification to this extent; the same color, or approximately the same color, can be obtained at a lower temperature by an increased exposure and a more restrained developer, but at a much slower rate. My reasoning, then, on what takes place in the production of these warm colors by a restrained developer at a high temperature and with a prolonged exposure, is that the exposure produces a number of developable nuclei in proportion to the amount of the light-action, and these nuclei the chemical developer, owing to its relatively high bromide content, can attack only slowly; but, at the same time, the high temperature enables the thiocarbamide to dissolve the silver and hold it in suspension in a state of extremely fine sub-division, in which state some action of the developer causes it to be deposited upon the developing nuclei, the adjustment of factors being such that the necessary density is obtained whilst the silver particles are still of the correct size to give the desired color result. It seems to be a matter of balancing the forces at work.

The developing image seems to pass through a definite and regular sequence of colors, beginning with yellow, from which it passes to red, then purple, blue, blue-grey and black, but in normal development the earlier steps are passed

through so rapidly as to be almost invisible.

[Various slides were shown to illustrate this progression of colors.]

The production of a slide in a desired color then means that the factors governing development have to be so adjusted that the requisite density and contrast are attained before the color passes beyond that required.

It is a well-nigh impossible task to devise a means by which any approximation to a uniform density can be secured. If we depend on visual inspection, every color has its own deceptiveness of appearance. If we try a factorial method we find that every change in temperature and constitution of the developer demands a different factor.

The final color by this process cannot be judged until the slide is dry, because the color of a wet slide is entirely different from that of a dry one, and as the judgment of density is also somewhat uncertain, we have to trust to the proper adjustment of the governing factors on the basis of theory and experience to secure the desired color. My own experiences suggest that the character of the negative exercises a considerable effect upon the resultant slide, that negatives developed with different developers act in different ways, and that certain negatives will give slides of fine quality in particular colors, but not in others. There certainly seems no method at present by which the effects can be determined with absolute accuracy beforehand, and we are reduced to the unscientific method of trial and error.

The nature of the silver image seems to be complex. I have frequently found in attempting reduction with weak hypo and ferricyanide that a blue slide will turn decidedly pink in the reduced area, which I take to indicate that the silver particles have been reduced in size to the extent of affecting the transmitted color; whilst, on the other hand, a red-purple slide similarly treated will sometimes turn blue in the reduced area indicating that the purple was due to a mixture of red and blue particles, and that the smaller red particles have been dissolved, leaving the larger blue ones. On the other hand, many slides, both blue and purple, show no change in

color on reduction, so that the matter seems to be one to be relegated to the scientists for elucidation.

In my previous paper, referred to above, I described the varying appearance of the lantern plate during the progress of development, with a view to giving some guidance to the judgment of density, which is not an easy matter with this process. I need not now repeat this, as with the developer "S" that I have given you it is an easier matter. Dependence can be placed on a factorial method, provided steps are

taken to insure that the temperature is maintained evenly throughout. A factor of 5 or  $5\frac{1}{2}$  or 6 is about right, but it will vary according to both temperature and the composition of the developer. To use a factorial method successfully it is necessary to warm both the developing-dish and the plate to the correct temperature before commencing development, and to insure that there is no appreciable fall in temperature during the course of development. This developer is sensitive to minute variations of temperature, and extreme care is necessary.



Conducted by SIGISMUND BLUMANN

### Try This

After developing your print soak it for five or ten minutes in the usual acetic acid stop bath, then put a mask of the brown cardboard which comes with each package of paper over the print and expose it to daylight till it turns color slightly. You will have a picture on buff paper with a white margin or a white paper print with buff margin, according to the mask. Tint block effects may be produced in this way.

### MAKING PAPER NEGATIVES

By L. C. Ferguson

The following method for making paper negatives when broad, sketchy effects are required, has been used by the writer with great success. Nothing startlingly new is offered; the manipulation is the same as used when making contact prints, etc. The novelty lies in the fact that no film is used in copying as a step toward making the final paper negative.

To begin with, we will require a few sheets of single-weight bromide paper and the usual developing and fixing solutions, together with a small quantity of sweet oil. Now take the picture you are going to use and rub the back of it with sweet oil until partly transparent. Rub off all surplus oil. Place the oiled print on the printer face up and cover with a sheet of

the bromide paper. Make a contact print and develop. The resulting paper negative, when dried and oiled, can be used for contact prints or enlargements. If desired, the paper negative need not be oiled: use it just as it is, which will give a more sketchy effect. When used in the enlarger the negative should be oiled to decrease the time of exposure.

### A Clipping Library

Make or have made a neat box measuring five and a half inches wide, fourteen inches long, and six inches deep, inside measurement. Take a hundred catalogs or film envelopes measuring five by seven inches and label them on the flap with the subjects you intend filing. Put these upright in the box you have made and you have a filing cabinet for your clippings equal to any that you could buy for several dollars. My cabinet has a strip of Holliston photo cloth pasted to the bottom of each envelope. This strip extends a half inch beyond the envelope proper and has a hole punched through each margin, about an inch from the ends. A similar hole is bored through the box at each end and a wire run through. This wire being bent in a sort of square U permits withdrawal when one of the envelopes is to be removed.



## CAMERA CRAFT

### Will Tap Water Do?

Yes and no. It depends on the tap water. If a glass of water freshly drawn looks like milk or charged soda water the air will rapidly oxidize the developer and cause trouble. If the millions of tiny bubbles be gas instead of air worse trouble is assured.

In some parts of the country the tap water is rich in carbonates of lithia or lime or both. Alumina, that worst of photographic enemies, is not uncommon, and more generally Chlorine or Iodine are injected into reservoirs to kill germs or medicate the drink of the populace. The poor sensitive emulsions stand for a great deal but a shot of chlorine or iodine is somewhat too much for their sensitivity.

If your films or plates or your papers will not develop right, blame the manufacturer and keep in fashion, but if you have a will to be just, try boiling the water and if that does not remedy the matter use distilled water. In fact it should be within the rights of the manufacturers to refuse to make good on any sensitive materials put into solutions made with tap water.

### Duplicating Doubleprinted Pictures

It sometimes happens that in making a pictorial print from several negatives composited, by an especially happy accident, one copy is better than any produced before


or seemingly possible thereafter. Simply stop down your lens to 16 or even 32 and expose amply on a process plate or film making a copy negative from the choice print. Develop for contact to a plucky deposit with a full strength MQ or Pyro developer, or for enlarging, in a rather dilute MQ or Pyro, or best in one of the well known but seldom used Glycin formula. From this you may print or enlarge as many identical copies as you need.

### Retouching Without Marking Negative

A landscape negative as well as a portrait may need radical treatment and the amateur approaches such a task with trepidation. There are so many chances for spoiling a valuable negative. This wrinkle is neither new nor difficult. Just touch the edges of the glass or shiny side of your negative all around its edges with liquid glue and lay a sheet of selected tissue which has been slightly steamed over it. Put under a book to press and when dry you will find the paper taut and ready to take the retouching. Be sure to pick paper that has no spots or flaws. Print after retouching in the usual way.

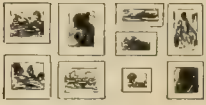
Should you desire to enlarge from the subject, proceed to make a positive on process film or glass plate and from this make your final negative. This is a way to get a soft or contrasty negative, as wanted, and many times will prove to be better than the original.

SALON WEEK  
IS COMING



CLUB NOTES

EVERYPRINT  
A WINNER



### Brooklyn Institute

The Department of Photography of the Brooklyn Institute and some of its friends, to the number of 175, listened to a fine lecture by Nicholas Haz, A. R. P. S., October 6th, at the Institute. Mr. Haz talked on "Rules in Art, and Their Application in Studio Portraits", and illustrated his points with diagrams and many slides. He also demonstrated lighting effects on

still and living models and made his lecture one of the most interesting the club has ever enjoyed. Mr. Haz and Mr. Greenberg will alternate in conducting the new class which opens its sessions October 13th.

The calendar of the year's events has been printed so members may look forward to the treats to come and arrange other engagements so as not to interfere there-

with. Copies of this calendar, which may well serve as a model for other camera clubs, may be had from the chairman of the Publicity Committee, Samuel P. Ward, Department of Photography, Academy of Music, Brooklyn, N. Y.

## **To E. F. of Chester, Pennsylvania**

If it be all the same to you, my dear E. F., will you sign your letters with the courage of one sure of his rights. We have an aversion to anonymous letters. And now regarding your objections to CC. and metric measurements: There is a persistent and recurrent effort on the part of the best professional and amateur photographers to have the Metric System adopted exclusively. This might be a blessing when one considers that recipes printed in Europe are in that system and many published in this country are in the *avoirdupois*. The decimal system is, moreover, more accurate in that there is not the danger of confusing the 437 with the 480 grain ounce. You can find tables for converting Cubic Centimeters (ccs.) to the usual measures in any copy of the British Annual, the American Annual, The Work-room Handbook, and any complete book on photographic manipulations. The particular question you ask as to a certain formula shall gladly be answered if you send your name and address.

## **Los Angeles Camera Club**

President R. L. Van Oosting has achieved his heart's desire and the club is now on the way to having an official organ, "The Developer," in such shape as will induce the members to carry it around with them in an inside pocket. Volume 1, Number 1 is edited by the Prex himself as Pro Tem. The meetings in February were of usual interest. For the second of that month the announcement warned bachelors that it was Leap Year. That meant the ladies were to be present and dancing might happen. It called for card tables and that meant bridge—everyone beware. The other Thursdays were all photographically applied. The thing that impressed us most about this, our Southern California Club, is that there is a definite and purposeful determination to avoid aristocracies. That is the soul of a club. Otherwise lies faction spirit and decay.

## **Fort Dearborn Camera Club**

At last a silence of two months has been broken and we learn from the new secretary that on January 6 the following officers were elected: president, A. V. Nelson; vice-president W. C. Swett; secretary, Jerome Donabyl; treasurer, M. Berrstein; print director, C. Frankenberger.

Mr. President Nelson, we make a motion that you have suitable photographs made of the new quarters at 537 South Dearborn street for our personal enjoyment and to show visitors to these offices who have been in Chicago and have enjoyed the company of this, our club.

## **Portland Society, Maine**

The annual photographic exhibition of the photographic section begins on the third of this month at the L. D. M. Sweat Memorial Art Museum and if the past be a tenable argument for the future, this year will show not only as good a collection, but better. Portland, Maine is probably second only to Boston as a center for the fine arts. In music it is distinguished, in painting it has a unique place and in photography it has given us several masters.

## **Chicago, What?**

The only way this member can attend the meetings of his distant clubs is by mail. Have none of you felt an urge to drop us a line? If not, why not? You can heckle and raspberry at long range and give and get fun of it. For instance, the editor of "Exposure" says that "Many a hard-headed amateur uses a soft focus lens." Does many a soft-headed professional use a hard-focus objective?

## **Cleveland Photographic Society**

Our friends, the Incs., are as lively as ever. With Ralph D. Hartman at the head how could they be otherwise? Lectures by eminent men, exhibits, mutual helps; something doing every night, but the erstwhile doughnut buried under the mountain of Inc. We are not losing our intimacy in the access of dignity, are we? Hope not. 'Twas too good to spoil. When, and if, we come to Cleveland again we shall hope, yes expect, the friendly doughnut and two cups of hot and strong to wash them down. Greetings, friends on the freshwater sea.

## CAMERA CRAFT

### Newark Camera Club

We have commented before on the manner of our mind in reverting to the brothers in photography, and the sisters above all, whom we met in club on our travels. Newark is another bright spot in our heart. Woodburn, Graether and the boys who gathered around the table for dinner and after that showed us their OWN BUILDING and all the valued things in it are very fresh in memory right now. One of our gratuitous and persistent critics has found pleasure in attributing these assertions of friendship and remembrance as "Business Bull." It will be hard to make our friends, those who were so good to us and who seem to like us genuinely, believe we have an ax to grind and immolate finer feelings on the sacrificial altar of gain. The Newark Club is a real club. It is thriving and should be an example to clubs elsewhere.

### Hammersmith Hampshire House Society

The above society will hold their annual exhibition on April 26, 1928, when the valued support of overseas friends will again be heartily welcomed. The accommodation for prints has been increased by the addition of extra screens and, by a further transparency cabinet, it is hoped to double the number of exhibits of previous years. There will be no entry fees, and all enthusiastic photographers are invited to send in their work as early as possible.

Come through generously and with your best, good friends. These Britishers do things well and take their art and yours and mine seriously and with respect. They are liberal at our salons. Address the secretary at Hog Lane, King street, Hammersmith, W. 6, London.

### California Camera Club

By a most remarkable coincidence the amenities have been conserved and we note that the View Finder has a cover picture of a Jersey waterfall made by Dr. Pardoe and that the Ground Glass shows a view of Del Mar, California. Verily, such things prove the genuinity of photographic fraternization.

Get this, ye easterners, on Friday evening, February 10, the members met for ice skating. Ice in California! They make it at great expense and what is not used in

the refrigerators through the winter is put down in a rink for sport.

On February's program one sees the usual evidences of social proclivities and the more welcome revival of photographic interest. The monthly showing of members' prints is growing and improving. Especial praise is due the hanging committee for the one man shows that have been provided over a period of two years. Mr. Paul Greve's work graces the walls at this time. The officers and committees are alive and on the job.

### Camera Enthusiasts of San Diego

The Camera Enthusiasts of San Diego were organized August, 1927, with the object of developing interest in pictorial photography and bringing together camera workers for mutual benefit.

The club was very fortunate in securing Harold A. Taylor of Coronado as its first president. Mr. Taylor, widely known as an artist-photographer, has been particularly successful in Autochrome work.

The club holds its monthly meetings in the beautiful new Fine Arts Gallery in Balboa Park. These meetings are held on the last Tuesday at 8 o'clock. The monthly programs usually feature a well known speaker along some photographic line, criticism of members' prints and general discussion.

Two quarterly exhibitions have been held among the club members; a showing of marines in October brought out some excellent prints. A display of landscapes will be placed on exhibit at the next meeting.

Announcement is being made of the First Annual Salon, which will be held in April. Prints for this exhibition will be limited to Pacific Coast workers and entries close on March 27. Visitors to San Diego are always welcome to the club.

The Fine Arts Gallery, in the XVI century style of architecture, was given to the people of San Diego in February, 1926. An important part of the policy is hospitality to workers in arts and crafts and assistance to creative work. The management has much enjoyed having the Camera Enthusiasts and is grateful to them for beautiful additions to the permanent collection.



## CAMERA CRAFT

### Blue Bell Camera Club

The Blue Bell Camera Club desires to get in touch with every picture maker in our organization, whether they push the button, roll up the film and take it to the corner drug store, or work long and laboriously spreading paint on canvas with a set of brushes. The activities of the club are planned to take in all phases of picture making.

As an incentive to serious photographic work, the following competition is announced, open to all employees of our company.

1. Pictures must be taken by the employee who submits the print.

2. Any number of contact prints of any size may be submitted, but no enlargements.

3. Name and address must be on the back of the print, with the title, for identification.

5. Winning pictures will appear in "The Mouthpiece."

5. Prizes will be as follows: First—One-year subscription to either American Photography or Photo-Era. Second—Same for Camera or Camera Craft. Third—Two years' free membership. Fourth—One year's free membership.

6. Send prints to Miss G. E. Smith, secretary, Room 171-A Bell Telephone building.

### Portage Camera Club

This letter is too nice to pass with mere mention. Whatever the justice of the kind words spoken of us, the intention is to create happiness and in that has succeeded.

We print it in full for that and the more valuable information it contains.

"You probably haven't heard from Portage Camera Club, Akron, Ohio, for a long time, but we are still alive, in fact more so than ever, having just finished up our first year of existence successfully, and 1928 prospects are decidedly encouraging. Our annual election was held January 6, with the following results:

H. P. Herron, president, 49 Mt. View avenue, Akron, Ohio; Paul C. Bork, vice-president and print director, 343 Hickory street, Akron; K. W. Pike, corresponding secretary, 1140 Mt. Vernon avenue, Akron, Ohio; Kenneth Luther, financial secretary and treasurer, 992 Irma place, Akron, Ohio; board of directors, C. H. Barnstorff, 697 Carpenter street; J. W. Schuler, 150 Locust street, J. P. Bader, 736 Harvard avenue, Akron, Ohio.

We succeeded in having our first traveling exhibit accepted by Associated Camera Clubs of America in its entirety. Our exhibit consisted of 40 prints representing 17 members.

Members will take part in Camera Craft competitions from now on and get in line for honors for our club.

We still remember, with much happiness, the very nice exhibit loaned us by Mr. Blumann, representing his personal work. We are looking forward to another one he might have in the near future.

Assuring you of our best wishes for the success of Camera Craft, we are, yours sincerely,

H. P. HERRON, president.

### Forthcoming Exhibitions

May 1 to 14, 1928. Second International Salon of Japan by the All-Japan Association of Photographic Societies, Tokyo. Transferred at close to Osaka June 1 to 7. Closing date March 31. Address Tokyo Asahi Shimbun, Tokyo, Japan.

May 11 to 24, 1928. Fourth International Salon of the Seattle Camera Club, 422½ Main Street, Seattle, Washington. Closing date April 5th for foreign, April 15th for U. S. A.

**Does Your Club Encourage You To Enter  
The Salons? It Should.**

# NOTES & COMMENTS



## Halldorson Cinema Lights

The new cinema mazda light has been designed especially for the amateur in cinematography. To use, it is only necessary to take the lamp from its neat leather finished case, mount on tripod stand, plug into any lamp socket, and turn on the switch. With all this simplicity, the lamp is considerably lower priced than an arc lamp of equal quality.

A 1000 watt tubular mazda globe is used. This globe operates at 9 amperes. When used alone with no other lights burning on the circuit, it is safely carried on the ordinary 10 ampere home fuses.

The Halldorson arc lamp is for more ambitious uses. The approximate light strength of this lamp is 18,000 c.p. This is sufficient for taking good pictures about six to eight feet from the camera with the lens set at  $f:3.5$ .

All products of this company are known as conscientiously made and fairly priced. Booklet fully detailing these and other lamps sent on request by the Halldorson Company, 4745 North Western avenue, Chicago, Ill.

## Leica Products

The Leica needs no other name. It qualifies instantly in the minds of the readers from its fame and quality. The smallest focal-plane equipped camera in the world, using motion picture film and giving an image that takes in two frames instead of the rather too small single frame. So carefully constructed is the little Leica that it takes place as a scientific instrument of precision, yet, withal, so simple in operation that it has become a favorite with the casual amateur.

Not less noteworthy is the Leica Enlarger. Compact, efficient, and made to give maximum enlargement with minimum grain. An instrument so outstanding as to have been adopted by other manufacturers for enlarging from small negatives made with their own instruments.

The Leica Motion Picture Film developing outfit is another achievement. In fact it would benefit our readers to familiarize themselves with the line. Write to E. Leitz, Inc., 60 East Tenth Street, New York City, or to their western agents, Spindler and Sautpe, 86 Third Street, San Francisco, and 811 West Seventh Street, Los Angeles, for illustrated literature.

## Hammer Plates

Glass plates are coming back as surely as portraiture is going to see a period of oldtime prosperity. The professional portraitist is yearning for the effects and reliability of his long used to negatives. Dealers are already noting increased sales in plates.

No one in the photographic intelligentia class can think of plates without thinking Hammer. They were always standard and superlative and that their popularity has survived and their use continued is proof of quality. It has been our recent privilege to work with several of the brands of Hammer plates and to test the 700 H and D speed. Think of that for speed, you newspaper men and aerial photographers.

Our advice, which takes the form of a recommendation, is to write to the Hammer Dry Plate Company, St. Louis, Missouri, for literature and educate yourself in what modern plates offer.

## The Memoscope

The little, complete Memo took the market by storm. It is a furor and many items of photographic merchandise have sprung up around it: the compact pocket projector that sells for a few dollars, for instance, and now a complete and fully adequate lantern with finely ground condensers and lens and a 100 watt projection lamp, complete for \$19.50. With this device a clear and bright image may be projected which is plainly visible across a large room or small sized hall. We are informed that production is behind orders and you are advised to order yours now.

# CAMERA CRAFT

## A New Firm in Cameras

Persistent rumors have it that the famous QRS Company of Chicago, long known as makers of QRS music rolls and Zenith radios, is going into the motion picture machine manufacturing. The thoroughness with which this concern has approached every subject which it undertakes, its limitless generosity in planning and consummating its enterprises, gives us hope that movies will get something new, something outstanding, something great.

## Holliston's Chicago Branch

Holliston photo cloth will now be distributed in that territory of which Chicago is the center from the Chicago office, in charge of Stuart Miller. Orders formerly sent to Mr. Cook are now to be forwarded to Mr. Miller.

## Dallmeyer Lens Book

Herbert and Huesgen, American agents for the Dallmeyer concern have for distribution to those interested a neatly bound book on Lenses for Amateur Cinematography. Really, the little volume is more than it claims, for we found it enlightening on the matter of cameras, filters, light-meters and the many appurtenances that have come into being to make cine work easier and better. It is a well written, well printed, well bound book that should be in the hands of every motion picture enthusiast. Your copy waits upon a simple request, there being no cost, mailed to Herbert and Huesgen, 18 East 42nd street, New York City.

## Southern School Burns

The following from Dad and Ma Lively will find a ready sympathy in thousands of hearts. Every day that the institution remains closed is a loss to many. Our own sentiments may be expressed in a wish that so many enrollments pour in on Daddy that he will have to find some way of conducting his school while waiting for the rebuilding.

To My Friends in Camera Craft, My Friends at Large, and Students:

The fire originated in the west wing of the building and alarm turned in at 8 o'clock Wednesday evening, January 4, while we were at prayer meeting.

The entire building, except the east wing, was destroyed and that was badly damaged. A part of equipment and household goods were removed, but badly damaged. The building and contents were only partially covered by insurance.

We do not know at present what we shall decide to do, but will not attempt having school before fall.

The many kind expressions of sympathy we are receiving are very helpful to bear the burden.

You will be glad to know the 30x60, larger than life, carbon prints were saved.

DADDY AND MRS. LIVELY.

McMinnville, Tennessee.

## Gevaert Products

We wonder if every photographer, amateur and professional, knows the Gevaert line of papers, films and plates as well as he should? There is no better bromide paper than Novabrom, no better film than Gevaert in roll or pack and in extreme speed, ortho and non-halation. We have a kindly feeling and a great admiration for the minor utilities marketed by the firm. Its developers are all one could demand in durability and tone producing qualities. A request of the firm at 423 West 55th street, New York, will bring literature of inestimable value.

## Inquiries Without Addresses

Every once in a while the business office receives a letter signed properly enough, but without return address. When such a message contains money and applies it to subscriptions or merchandise there is nothing to do but wait for further particulars. It has happened, too, that the letter complaining of non-receipt of equity is also without address. By noting the city on the post office cancellation stamp (when it is legible) we have tried mailing to the town, but since these letters come back to us for better directions it is imperative that we wait and hope that sometime the writer may absent mindedly put his address at the head, the end, or somewhere in the body of his communication. Be good to us, gentle reader. Divulge the secret of your home or business. We will not tell anyone.

On this basis we should like to learn where F. P. Conard may be addressed.





*Taken with the Traut Minima Pocket Arc Lamp*

## The Traut Minima Light

Here is something for the home portraitist, the commercial photographer and the amateur with a flair for artificial light photography. A twin arc lamp which, when closed looks like and has the dimensions of a metal cigar case. Not like a humidor, but mind you, like a pocket cigar case. The lamp itself is self contained and easily goes into the breast pocket. The cord and plug and the tiny rheostat might make a side pocket bulge a little but not much.

As the lamp is very light and is used by holding in the hand, it is possible to achieve any sort of lighting, even to a flat, full-front effect by moving the contrivance in a wide quarter-circle while the shutter is open. This the makers term a "traveling light source." The above picture was made in 5 seconds with one such lamp, the lens being an f:1.9 full open.

We must confess we were skeptical of the possibilities claimed for so small and cheap a lamp but actual use has convinced us and we are prepared to recommend it unqualifiedly for any purpose to which it is fitted. H. Traut, Munich 2, NW 5,

Briennerstrasse 56, Germany, will gladly send literature or on receipt of advertised price, gladly forward the outfit complete and fully guaranteed. Money refunded without argument if not as represented, is the basis of the firm's sales.

## Imperial Pan Film Pack

The Imperial Dry Plate Company of London, England, are highly elated these days at receiving letters of commendation for their Panchromatic film packs from American consumers. G. Gennert, Inc., of 24-26 East Thirteenth street, New York, their United States agents, notify us that the sales are an even better indication of merit in the goods and appreciation on the part of the public.

## San Francisco Camera Exchange

An establishment that buys and sells second-hand photographic apparatus has a place of peculiar usefulness and thrives in degrees proportionate to its integrity. The San Francisco Camera Exchange, 88 Third street, has established a reputation for fair dealing and service which has gotten for it a deserved success.



# OUR BOOK SHELVES

## The Photographic Workroom Handbook

It ill behooves us to review our own book and it were ungrateful to a public that has so generously bought up the first edition to agree with our severe critic in his diatribes. We can, however, assure the reader that be it for its merits or its faults it is not only selling but seems to get a marked degree of commendation from those who have bought. The purchaser must be our final critic. One of these returned it with a demand for his money back and a letter of unrestrained abuse. Several thousand have paid and seemingly their recommendation has sold the issue. One dealer orders in hundred lots. What shall we say? How may we feel? Is it within our rights to be gratified without conceit? To bespeak the book to those who may find it just what they need and what it claims to be? Look it over at your dealer's counter or order through Camera Craft. Ninety pages closely printed in clear type, semi-flexible covers in tough board and cloth back; price one dollar.

## Pictorial Work of the R. P. S. 1927

The second issue of what was called an annual when it first appeared last year is before us. Briefly introduced it is a collection of F. C. Tilney's choice from the showing made at the Royal with a critique or review of each print and some casual opinions by the way.

That the text should have taught us much is faint praise since there is so much for us to learn, but that we should consciously pick this reading matter from the mass received through the year as most profitable and recognize in the pictures such decided discrimination will be accepted even by the author as reflecting on him with more or less of a compliment.

Tilney can never be dull. When he is most didactic and splits hairs in deference to the precedents of photographic criticism and analysis he can no more avoid scintillating than he can refrain from pro-

jecting himself into an argument, preferably a controversy. Bright or instructive, his matter is all meat and we advise those who crave knowledge of what constitutes good pictorialism to read this book and study the illustrations.

The prints chosen represent the best with few exceptions. Fewer than usual have been included from friendly motives. One or two must have taxed the writer's ingenuity and these have been most minutely analyzed, as if to hide their weakness in much explanation. But to our mind any ten of the sixty odd shown are worth several times the cost of the book.

The full title of the work is "The Pictorial work of the Royal Photographic Society of Great Britain, 1927, with a Critical Dissertation by F. C. Tilney, F. R. P. S." Published by Simpkin, Marshall, Hamilton, Kent and Company, Limited, London. Bound in heavy gray paper. Sold at five shillings or the equivalent in whatever country. At your dealer or through Camera Craft.

## Camera Craft Book Service

The publishers and Camera Craft prefer that you patronize your dealer, but if there be no shop within convenient reach or for some good reason you desire to deal otherwise, Camera Craft will fill your orders on the shortest notice and in the promptest manner.

Camera Craft Publishing Company's service in this way covers the books of the photographic world, irrespective of publisher or nationality.

## The British Annual

This is not a book, certainly not just a yearly publication. It is, in fact, an institution that has survived a thousand photographic eras and has kept up with the times. Its popularity is perennial and its usefulness not to be measured by any cost, yet it is sold at a low price. No photographer, be he amateur or professional, can afford to miss an issue of the British Annual.



# CAMERA CRAFT



SPRING FLOWERS

BEIDLER STUDIOS

SAN FRANCISCO

CALIFORNIA





*Gevaert*



# Ortho Commercial Film

(H & D 400)

## Ideal for the Pictorialist Using Cut Film

Fast—with good color correction—an emulsion rich enough to obtain any desired degree of contrast.

*Ask for Catalog and Price List*

New additions to our already complete line of surfaces in Bromide Paper can be supplied in our new enlarging paper—Portrait Bromide—For Portraiture.

*Send for Descriptive Booklet—Dept. No. 4*

**THE GEVAERT CO. OF AMERICA, Inc.**

423-439 WEST 55TH STREET, NEW YORK CITY

CHICAGO, ILL.

413-421 N. STATE STREET

PORTLAND, ORE.

345 SALMON STREET

TORONTO, CAN.

131 YORK STREET

*Dealers in Principal Cities of United States*

# The Winners

Two Competitions  
MONTHLY

of OUR COMPETITION PRIZES are so satisfied that their prints come to us before each month's judging.

Have you sent in yours? Why not give yourself the fun of trying to win one of the five prizes? You'll enjoy it.

Get your prints in before the 5th of each month.

## Camera Craft Publishing Company

703 MARKET STREET • SAN FRANCISCO, CALIF.





A REAL BOY  
*Spencer and Stolle*



# CAMERA CRAFT

*A Photographic Monthly*  
SIGISMUND BLUMANN, EDITOR

*Claus Spreckels Building, San Francisco, California*

FOUNDED MAY 1900

VOL. XXXV

APRIL, 1928

NO. 4

## The Second Annual International Kodak Salon

By Sigismund Blumann

Illustrated by Reproductions from the Prints



When men at the head of a great industry, as great as the Eastman Kodak Company, find time and interest in their employes sufficient to look to their leisure hour happiness — when those employes find their occupation so pleasant that their leisure hours are given to using the materials they make in the hours of labor — something fine, something really fine exists that does not appear on the surface.

George Eastman once said that he attributed the growth of the concern less to any factor than to the loyalty and enthusiasm of the men and women who made and sold the goods. Right, Uncle George. Things like this salon and the spirit back of it prove your contention.

The Kodak International Salon of Photography was inaugurated with the idea of stimulating the interest of all Kodak employes the world over in the artistic side of photography, and to induce them to become thoroughly familiar with the products they manufacture and sell.

The first salon was held in London a year ago under the auspices of the Kodak Staff Photographic Society of England and the Kodak Park Camera Club of Rochester, New York, U. S. A.

This year's salon held at Kodak Park last month was sponsored by the same two organizations and in addition by the Kodak Works Camera Club of Harrow, England.



DWARFED—*Eastman Medal*

*Roger P. Leavitt*

CAMERA CRAFT



MISERE—Bronze Medal

*Jean Hoehn*





IN OLD STAMBOUL—*Australian Trophy*

*Helen S. Williams*



*A Misty Morn*

*A. E. Amor*

Four hundred and fifty prints and three transparencies were received. Unfortunately four entries from Bombay and Calcutta, India, were received too late for classification and judging.

Although the competition was open only to members of the Kodak organization, nearly all of the many countries to which Kodak extends, and that means the entire civilized world, were represented by prints.

Among the winners of recognition were pictures from South Africa, Germany, Italy, England, Switzerland, France, Australia and Portugal, and, of course, many of our photographic experts from many American cities were contributors.

The artistic quality of the entries was remarkably high, and no one envied the judges in their difficult task.

The judges of the salon were William A. Alcock, of New York, who was a judge of the Royal Photographic Society Salon in London in 1926; Dudley Hoyt, of New York, a professional photographer of international fame, and C. A. Pierman, president of the Buffalo Camera Club.

The awards consisted first of the Eastman medal, designed in gold with a portrait of the donor, given this year for the first time, it becoming the permanent possession of the winner.

*An Italian Country Kitchen**A. Frattini*

The second prize, the Australian trophy, presented by Mr. J. J. Rouse, director of Kodak Australasia (Pty.) Ltd., must be won two years in succession to become the permanent possession of the winner.

Ten bronze medals and twenty-eight certificates of merit were also awarded.

Roger P. Leavitt, of Kodak Office and a member of the Kodak Park Camera Club, was the winner of the Eastman medal, and the Australian trophy went to Miss Helen S. Williams, also of Kodak Office, Rochester.

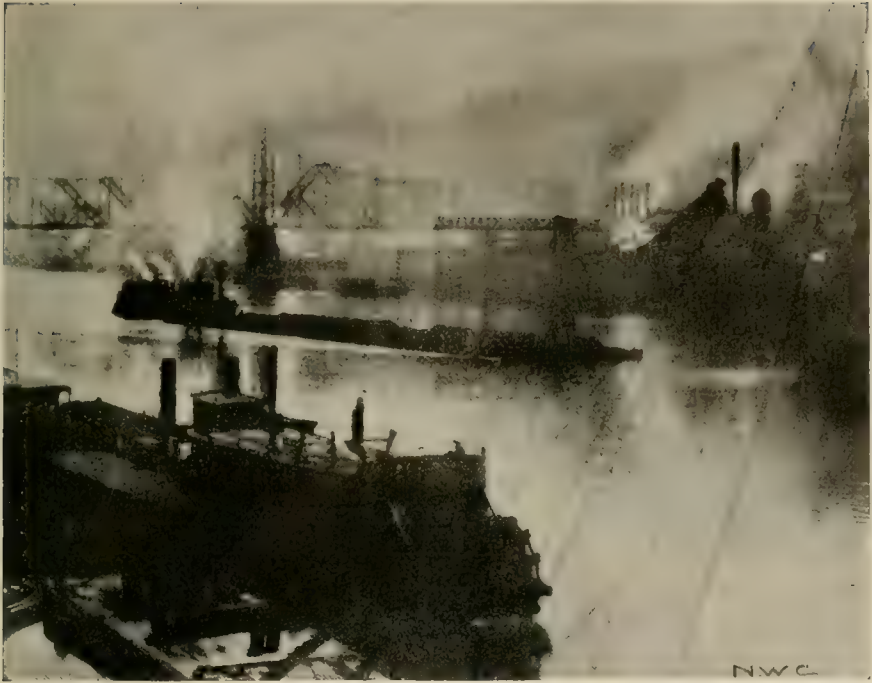
Winners of bronze medals were:

A. E. Amor, Harrow, England; Dante Astorri, Milan, Italy; Mario Beltrani, Genoa, Italy; N. L. Ferris, Rochester; Mrs. I. Hoffman, Cape Town, South Africa; Jean Hohn, Lausanne, Switzerland; Edward K. Jones, Cape Town, South Africa; Victor Rayment, Rochester; Robert W. Scott, Cape Town, South Africa; W. Tigg, Harrow, England.

Winners of certificates were: Mrs. Elide Alberti, Milan, Italy; E. Baker, London, England; Frank H. Bauer, Berlin, Germany; M. R. Bradford, Paris, France; A. G. Brown, Melbourne, Australia; Mrs. A. Caprani, Milan, Italy; C. L. Clarke, London, England; J. F. Cornwall, Cape Town, South Africa; Ralph J. Fallert, Chicago, Ill.; A. Frattini, Milan, Italy; V. H. Ham, London, England; J. M. Hoffmeister, London, England; H. Howarth, Toowoomba, Australia; J. Harold Hudson,



## CAMERA CRAFT



*Pittsburgh*

*Newton W. Crowder*

Rochester; A. Klubert, Cape Town, South Africa; Glenn E. Matthews, Rochester; Miss Matilde Pacinotti, Genoa, Italy; J. C. A. Redhead, Harrow, England; Stanley Schofield, Harrow England; C. A. Shadwick, Hobart, Tasmania; Henry Shilton, Vincennes, France; H. A. Snape, Brisbane, Australia; Henry Sorenson, Copenhagen, Denmark; Ernest Spencer, London, England; T. D. Tennant, Rochester; C. H. Willmore, Harrow, England; H. B. Wills, Rochester; John W. Zarley, Chicago, Ill.

The presentation of awards was made at the Kodak Park Assembly Hall where the exhibit was held, the Eastman medal being presented by Mr. Eastman in person, in the presence of a large assemblage.

Mr. James H. Haste, manager of Kodak Park, opened the proceedings by announcing the prize winners, and expressed great interest in the future of the salon, and the various Kodak photographic clubs, and with the hope that they would continue to grow until every Kodak employe, everywhere, was enrolled.

Mr. Haste was followed by Mr. Frank W. Lovejoy, vice-president and general manager of the company, who likewise expressed his great interest in the future growth of the Kodak Photographic Associations.

Mr. Eastman, in presenting the Eastman medal to Mr. Leavitt, stated that he had been the head of the great organization for many



*Lisbon Harbor*

*H. Mani*

years, from the time when it was very small, and when he was the only employe. He expressed great interest in the future salons and the growth of the Kodak Camera Clubs.

The salon was in charge of the following exhibition committee:

Kodak Staff Photographic Society—R. Kershaw, chairman, J. M. Hoffmeister, W. F. Slater, F.R.G.S., F.R.P.S. Kodak Works Camera Club—E. A. Robins, chairman, A. E. Amor, J. B. Elliott, C. L. Manlove, J. C. Redhead, W. Robinson. Kodak Park Camera Club—R. P. Leavitt, chairman, K. M. Cunningham, J. H. Hudson, Glenn E. Matthews, Victor Rayment, D. N. Sederquist, F. L. Wadman, E. P. Wightman.

I don't know how this show impressed those who saw it, nor how it reacted on the projector and the participants, but I will hazard a guess. Mr. Eastman feels after each Salon that all the lions he killed were not in Africa and that he has not ceased achieving things in photography since his retirement. And the picture makers, consciously or subconsciously, feel that living from and by photography they owe something to the Art which makes the factory possible. It is a good cause.

# Camera Work of Moving Pictures For the Amateur and Professional

By Ernest M. Reynolds

Illustrated by the Author

(Continued from the February Issue)

## THE ANALYSIS OF MOTION

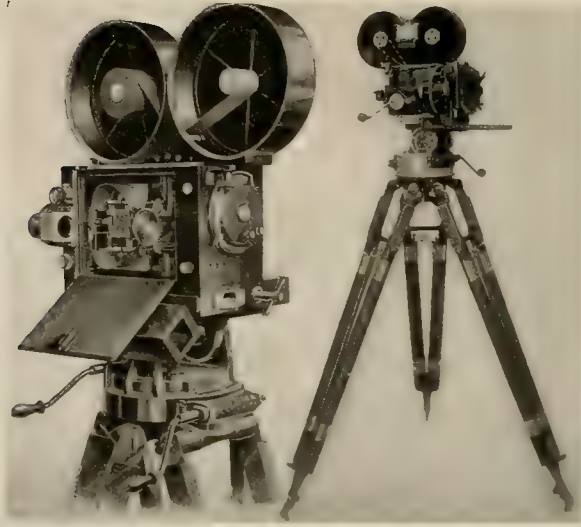
Another very surprising fact is the small number of people who have any comprehensive idea of how the reproduction of motion is made possible. The following is written in an attempt to clear up the mystery of what makes the movies move.

Let us take for example, the ordinary photograph of some scene such as a horse leaping over a hurdle. The picture itself was snapped while the horse was actually in the process of going over the hurdle, in other words, taken in action. This single picture shows the horse still, as if held in the air by some supernatural force. Our reasoning power and the law of dynamics tell us that this horse was going over the hurdle while being photographed.

Just so with the moving picture film when viewed by holding it in the hands as you did the photograph of the horse. The only difference is that the moving picture film is a series of snapshots taken in rapid succession, each picture being photographed a fraction of a second later than the previous one. Select any one of this series of single pictures and it in itself does not show any more motion than did the picture of the horse. It is the viewing of these successive pictures, one after the other, thrown upon a sheet or screen, which gives us the impression of motion. Each picture rests upon the screen for a fraction of a second, while it is being viewed by the eye, and then passes on to make way for the next picture. The blur of moving from one picture to another is obviated by a shutter which cuts off the beam of light at the point of projection and moves out of the way again when there is a new picture to be shown.

To illustrate this idea of motion a little more clearly, go back again to the picture of the horse and the hurdle. Say that instead of one camera taking a single snapshot of the hurdling, there had been two cameras. Camera number one took a picture when the horse's feet were five feet off the ground and camera number two took a picture just a fraction of a second later and photographed the horse's feet just a few inches off the ground. When you look at picture number one, it proves no particular motion to you, except as before stated, our common sense tells us that a horse could not have reached such a position without considerable motion. By comparing this picture with snapshot number two, the eye at once sees, instinctively, the change in position of the horse, and immediately the idea of motion is conveyed to our minds.



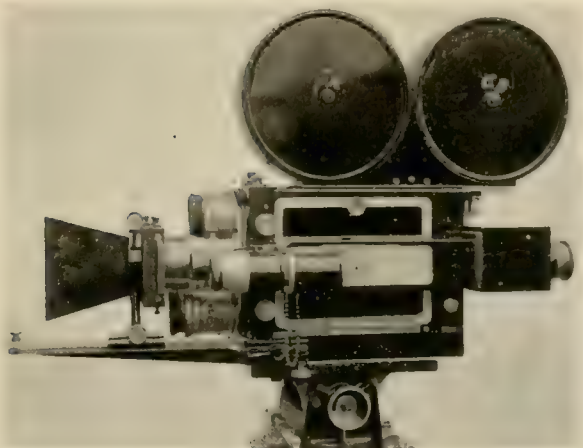


Just so it is with a strip of motion picture film, except that instead of two exposures being made to illustrate a definite action, there are thousands of exposures or pictures, each contributing its little part to the great king of motion. In the standard size of motion picture film used today, there are sixteen frames or pictures to the foot of film. It is just a case of common arithmetic to figure then, how many actual pictures we see when we speak of seeing a feature film. The average feature is six reels in length, with a thousand feet to the reel, or ninety-six thousand pictures in a complete feature film. The screen time, or time for projection has a standard of one foot to the second which would mean that one should see a six reel picture in no more than an hour and forty minutes. The tendency today is to speed up the screen time of a picture rather than give it the normal allowance of time.

## PICTURE FILM AND ITS MANUFACTURE.

The motion picture film strip is not unlike the ordinary Kodak film in its material make-up. The base or body of the film is the so-called celluloid, transparent and of a very high grade to insure against defects which might spot the surface. This celluloid is coated with an emulsion which is sensitive to white light. Large sheets are made in this manner, always being kept in a room illuminated only with ruby-red lights. The enormity of this sensitizing process can readily be seen when it is said that it is common to make wide sheets four hundred feet long. Add to this the fact that the combined thickness of this film, base, and emulsion coating cannot vary a thousandth part of an inch. These large sheets are then cut into strips one and three-eighths inches wide and two standard lengths—two hundred and four hundred feet long.

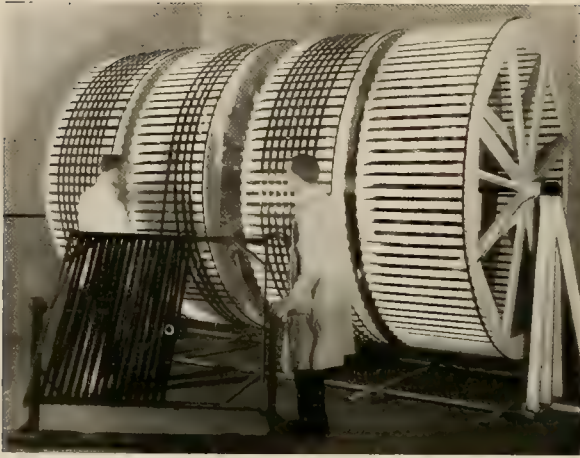
## CAMERA CRAFT



Next these strips are perforated, two rows of holes are punched, each row about three-sixteenth of an inch in from the edge. One hundred and twenty-eight holes to each foot of film.

The foregoing method of manufacture is practically the same for both negative and positive film, the only difference being that the emulsion for negative film is eight times faster or eight times more sensitive to light than that of positive film. The reason for this is that more sensitive emulsion is better adapted for making fast exposures as in cinematography. It is the negative film which goes into the camera to make the first step of the actual moving picture.

We will now take up in detail the process of making a moving picture film in its negative form. As before stated the film is purchased in two standard lengths—two hundred and four hundred feet. Let us consider that our camera is designed to hold two hundred feet. When the raw stock is purchased from the manufacturer, it is wound in spiral form such as a spool of ribbon. This roll of film comes to the photographer in air- and light-tight cans, sealed and carefully boxed. The film is then transferred from the can to the magazine which is designed to hold the film in the camera. Keep in mind that this transfer process must be done in the dark. The magazine is so constructed as to have an outlet at one corner which is a slit just wide enough to let the film pass through and yet admit no light to the interior of the magazine. This loaded box of film is placed in the camera and the projecting end of the film threaded into the mechanism which starts it on the speedy journey toward the lower magazine where it is wound up after exposure. The film as it passes through the camera comes to a place where it is in front of the lens and here it “rests” for about one thirty-second part of a second. During this time the exposure has been made and then the intermittent mechanism draws the film strip down until a new unexposed portion of the film is in its place.



Thus the exposing routine is carried on, one after the other, making sixteen pictures a second. The size of these pictures or frames is three-quarters by one inch. There are many different makes and designs of camera with a very wide range of prices. The professional camera carries all the equipment for making the fancy effects which we see on the screen today. Let it suffice to say that the professional camera outfit complete for photographing the feature picture costs in the neighborhood of three thousand dollars. However, there are dependable makes offered to the public for approximately five hundred dollars.

Development of negative—the film magazine is removed from the camera and turned over to the laboratory which will develop the negative film. It must be kept in mind that the film is in a two hundred foot length and cannot be broken as this would undoubtedly ruin a very important scene or action. Therefore the entire length of two hundred feet must be developed at one time. To do this the film is wound upon a frame about four feet square. The emulsion side of the film is kept outward so that nothing will touch the extremely sensitive surface. After it is wound upon this frame it is immersed, frame and all, in a tank about three inches wide or just wide enough to let this frame of film pass down into it in a vertical position without the film touching the sides of said tank. The developer is in this tank. No attempt will be made to explain the chemical process of developing as it is practically the same as that used to develop Kodak films. The solution itself is formulated somewhat differently, making it more suitable to the particular task at hand. When the film has reached the proper stage it is removed from the developer tank and placed in a similar one containing water. This is to wash off all traces of developer and also to immediately stop development. After the film is thoroughly rinsed in the water it is removed to the hypo tank where the chemical action proceeds to “fix” the film or complete the process of development. Another prolonged wash-



## CAMERA CRAFT



ing of about twenty minutes to a half hour is the next step whereupon the rack with its precious strip of film is brought into the white light or daylight for the first time. It is then wound from the rack onto large drums which are turned rapidly and thus the film is dried.

The negative now being complete is ready for the printing of the positive. This positive film is the one which is used in the theater and of course is the corrected image; as the negative is the "reverse". A printing machine with mechanism somewhat like that of a camera is threaded with two films, the developed negative and the unexposed positive film. The mechanism of this printing machine draws the film down before an aperture back of which there is a light. The negative is placed in such a manner as to bring it in front of the positive when they reach the aperture of white light. In this way the positive is printed from the negative, the entire operation being done practically in the dark. After the film has been run through the printing machine the positive goes back to the laboratory and receives nearly the same treatment as did the negative in developing, washing and drying.

It is now ready to have its first screening and there it is placed before the court of judgment to decide whether it is good or bad. Little or nothing can be told about the "action" in the film until it is thrown upon the screen. Titles are made by photographing printed or hand lettered cards with a moving picture camera. The usual size of these cards is about eleven by fourteen inches. This film is then put through the laboratory as was the regular picture film. These titles are patched into their proper places in the film by an especially trained person called a cutter or assembler. It is usually a case of these patches being poorly made which causes many moments delay when the picture is suddenly cut off from the screen in the middle of a story.

Projection of the positive film is based upon the same fundamentals as in other steps of the manufacture. This positive is wound into rolls or reels of one thousand feet each. A reel of film is placed in the projecting machine and passes over a sprocket and down to the intermitting device which takes the film step by step in front of a very powerful arc light. The rays of this light have been condensed, through a series of lenses, down to a small spot and adjusted to throw on the aperture plate. As the little picture frames jump past this light they are projected upon the screen. The shutter is found on the projector as on all other picture machinery and carries out the same principle of cutting off from the screen the movement of film from one frame to the other.

No little study has been given to the texture and surface of projection screens. At present there are many types of screens upon the market. In the early days a large canvas, bleached to a chalky white, was used with a fair margin of success. But today with the larger theaters and general development of the industry to a finer degree, the call for a better screen has been incessant. An important feature first developed was the reflecting screen, that is, one with a surface which would tend to reflect some of the light and image thrown upon it. One of the most prominent screens today is one which is made up of a beaded surface. Small glass beads, adhered to an already white surface, lend a remarkable reflecting appearance and increase the amount of illumination upon the screen.

## BLUE SYMPHONY

By Verne Bright

*In a purple valley  
The blue brook sings,  
All its pools and rapids  
Are feathers and wings*

*Of bluebirds and bluejays  
And cockatoos;  
And the flags on its borders  
Hold richer hues*

*Than robes of emperors  
Or Tyrian dyes,  
Than mountains in moonlight  
Or April skies;*

*And the flags on its borders  
And the birds in the trees  
Cry to each other  
Blue symphonies*

# Photography in Metapsychics

## A Brief Resume of Its History—Method and Present Status

By Philip S. Haley, Ph.C., D.D.S.

*It takes more courage to write of ghosts than it does to face them. A courage to withstand contumely and ridicule and a strength to fight powerful because general and established skepticism. We are all inclined to deny the possibility of that of which we know nothing. We are, many of us, unwilling to exert our minds to conquering our ignorance.*

*Dr. Haley was for sometime President of the Psychical Research Society of San Francisco. He has courage, is a scholar and scientist, and, the reader should know, is the last person on earth to be deceived by credulity or fraud. He is not interested in the craft but in the science of what we know as the Supernatural.* S. B.

Most writers who have investigated the subject of the history of photography in that field of human endeavor known familiarly as psychic research but more lately called metapsychics, credit one W. H. Mumler with being the originator of supernormal photography. The word, as here used, refers to the production of pictures upon light sensitive surfaces with the help of agencies not at present understood. Whether these agencies are due to the operation of as yet unknown mechanistic forces or to that of intelligent ones derived from within or without the human organism has not been determined to the satisfaction of those who are investigating the subject from the standpoint of the known laws of natural science.

Mumler received his first view of a supernormal photograph by accident. He was employed at the time by Bigelow Bros. and Kennard, Boston jewelers. In 1861, in March, while in pursuit of his hobby as an amateur photographer, Mumler noticed a figure upon his collodion plate. This figure should not have been there, so, believing it due to accidental double exposure, Mumler cleaned the plate thoroughly, whereupon, after another exposure the extra form appeared again.

Since the time of Mumler many photographers have secured "psychic extras." Notable among these photographers who made thorough investigations was Mr. J. Traill Taylor. This savant was a member of the Council of the Photographic Society of Great Britain, author of books upon the physics and chemistry of photography, and editor of the British Journal of Photography. Taylor, after much study, became convinced that his experimental work had been accurately done and was free from deception upon the part of anyone concerned.

It is noteworthy that while the earlier American and English investigators usually received upon their plates the faces or full forms of human beings, the French workers often received the opposite, i. e., effluvia from the body or inanimate objects. Among the earlier French



workers was M. Albert Jounet. Jounet removed the lens from his camera, pressed his left eye into the opening and held it there for a half hour. He says the laboratory was carefully darkened and his head and apparatus enveloped in a black cloth. "On development the print showed some marks as though made with a paint brush, radiating around the point where I thought my gaze was fixed, and in addition, a rather large spot on one of the small sides of the plate, corresponding, in my opinion, with the direction of the nose and nostrils." Neither Mumler nor Taylor were spiritualists nor were the French scientists Jounet, Darget and others of the scientific French school who investigated the photography of the supernormal.

Darget was particularly successful in obtaining photographs which, like Jounet, he attributed to effluvia from the body. On one occasion he asked a butcher to hold, in his presence, a plate on the head of a freshly slaughtered calf. A cross-section of the brain was obtained. Darget's next attempt was to lay a small fern upon a plate enclosed in a box. In two days it was taken out and developed in a hydro-quinone bath. In addition to the picture of the fern which appeared, a shadow or perispit appeared about the leaflets. Darget was able, on other occasions, to obtain what were apparently thought pictures of objects held in his own or in other peoples' minds. Among these objects were commonplace things such as a walking stick and a bottle. The bottle picture was secured twice.

As to the methodology, it may be said that the means used in the securing of supernormal photographs have not changed since the days of the early investigators, except in the fact that the general improvement in cameras and flashlight apparatus has been made use of. In the celebrated work of Dr. Von Schrenck-Notzing in Paris, with the psychic Eva Carriere, several of the best type of cameras were used at one time, these being directed at the materializations photographed from several angles or different parts of the seance room. In making test demonstrations, Notzing employed various experts, including professional photographers. Careful analysis by Notzing and his colleagues showed that the attempt to imitate these photographs, by photographing artificially made forms of cheesecloth, goldbeaters skin and other substances such as newspaper clippings, failed in various details.

J. Traill Taylor knew that a camera box and lens was not necessary to psychic photography. He knew that a sensitized photographic surface might receive a supernormal impression which no known natural agency could account for when it was simply covered with a light excluding wrapper and placed beneath a pillow or in a wooden box. He also knew that such photographs taken with the stereoscopic camera did not exactly coincide in point of detail in both images. Late work done by Mr. Charles Lyle, at Crewe, England, bears out this fact as to the stereoscopic photograph.

## CAMERA CRAFT

I will quote first from Taylor whose work was done from 1864-1879. "It is due to the psychic entities to say that whatever was produced on one-half of the stereoscope plates was produced on the other, alike good or bad in definition. But on careful examination of one that was rather better than the others I deduced the fact that the impressing of the spirit form was *not consentaneous* with that of the sitter. This I consider an important discovery. I carefully examined the one in the stereoscopic, and found that, while the two sitters were stereoscopic, per se, the psychic figure was absolutely flat. I also found that the psychic figure was 1/25th inch higher up on one half of the plate than the other. Now, as both halves had been simultaneously exposed, this figure had not only been impressed on the plate simultaneously with the two sitters, but had not been formed with the lens at all, and that, therefore, the psychic image might be produced without a camera."

Mr. Lyle, working in 1923-1924 says: "I made (as on a former occasion) two exposures in my own stereoscopic camera, that is, on two pairs of plates. On the first pair of plates I got extras as shown in prints marked A and B. On the second pair of plates no extra whatever. You will notice that though simultaneously exposed, the two 'extras' of the same face are in different positions. The plates were put in the dark slides in my dark room in my own home by me and brought back (after exposure) at the college (British College of Psychic Science) and developed by me. They never left my possession, and Mr. Hope (the medium) never saw them."

In drawing this article to a conclusion, it may be said that among metapsychists the production of psychic photographs is known to be veridical. There are few indeed among the members of the Society for Psychic Research who do not think that true supernormal photographs have been taken. During a recent trip to Europe the writer visited the headquarters of both the British and American branches of the Society, The National Laboratory for Psychical Research, and the International Metapsychic Institute in Paris. At all of these institutions photography is used as a standard means of study of certain phases of metapsychic manifestation. In short, while the cause, be it a material one of the nature of entelechy, is not agreed upon among those best qualified to say, the fact is far less disputed than in the days of Mumler.

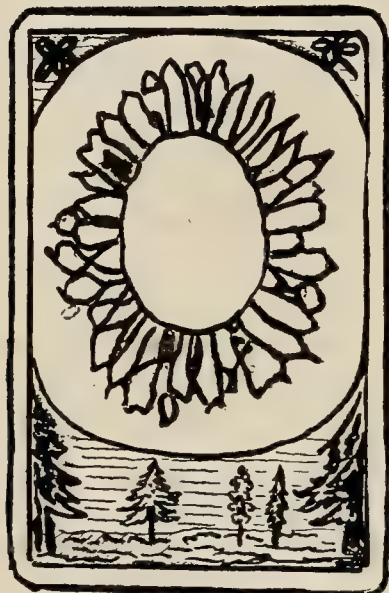
Photography, in itself a mystery, has proved and will prove one of the great factors in uncovering mysteries. Men seek the light in all things. Photos will supply it.

S. B.

# Photography in Science

By Professor Ingo W. D. Hackh

College of Physicians and Surgeons of San Francisco



CROSS SECTION OF A SPONGE

## IV. FINDING THE UNITY OF LIFE

Onward! Ever onward is the march of life! Life's unfoldment in the four-dimensional word of space and time we call "evolution" or "progress" and summarized by saying we gradually change from "the primitive, homogeneous simplicity" to the "modern, heterogeneous complexity."

Mere words to some, thoughts to others—but what has photography to do with it? Merely this: that the Darwin of today need not waste energy in travel, for with the aid of the photographic plate, color photographs and moving pictures there awaits him in library and laboratory a huge accumulation of biologic facts, ready to be fitted together and interpreted.

Direct photographs, photomicrographs, x-ray pictures, slow and fast moving pictures and the various photographic recording devices, all of these means are used to find the secret of life. And as a result our concept of living matter has been greatly changed, but the question: "What is life" remains still unanswered, although many interesting facts regarding life have been discovered.

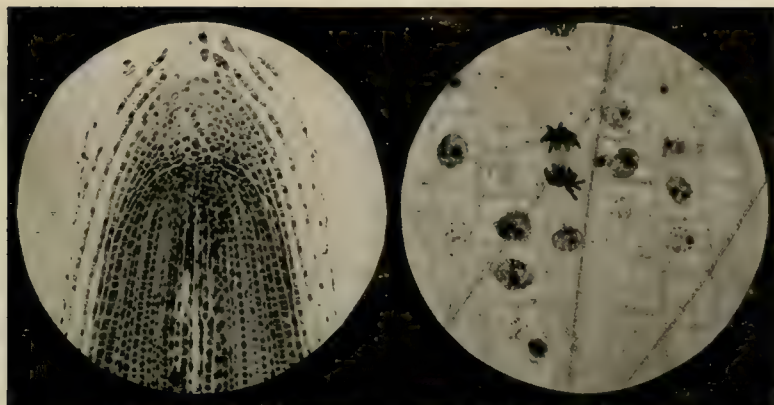
Man at first believed himself independent of his fellow-man, from the animals and the plants. Step by step this "biological independence" disappears as his knowledge of biological facts grows and the more fully he understands biology, the more and more will he realize his actual dependency and close relationship to all other living things, be it plants or animals or man. The same natural laws unite all living creatures, the same physical and chemical rules hold true and give them similar basic functions and similar basic structures, although on the surface they may appear as widely different.

### *The Cellular Structure*

What the telescope is to astronomy, the microscope is to biology and there is perhaps nothing more fascinating in all the world than a comparative study of the minute structures of the human body with the



## CAMERA CRAFT



MAGNIFIED 90 TIMES

MAGNIFIED 560 TIMES

*Root tip of an onion, showing cell division*

Courtesy General Biological Supply House

animal body or the plant body. All three contain cells of many different shapes for many purposes, yet all cells contain, as living matter, the protoplasm, a wonderfully intricate and chemically complex substance.

A strong light, a microscope and a photographic film or plate are the necessary tools to enlarge such structures. To differentiate their internal arrangement, for protoplasm is generally transparent and jelly-like, various dyes and chemicals are used which fix themselves to certain parts of the protoplasmic matter and produce then the characteristic pattern for the different tissues. Starting with any organism we can dissect it into organs, the organs into tissues, the tissues into cells—and each organ, tissue or cell has its specific function and activity, but all are co-ordinated and related to the whole. So every organism is a “state or empire of cells.”

### *Cell Division*

In the photographs there is a section of the growing tip of the root of an onion, one ninety times, the other 560 times magnified. The lower magnification shows the general arrangement of the cells, the higher magnification shows some characteristic differences within the cells. Connecting the several stages in an orderly sequence we have the process of cell-division or mitosis, one of the most marvelous processes in nature, which causes all living cells to grow and multiply. The biologist has found this mode of cell-division universal, for all vegetable, all animal and all human cells follow the same general procedure.

All cells contain a nucleus, a special kind of protoplasm, and when the cell divides this nucleus undergoes a number of characteristic and mysterious changes which appear under the microscope as if it were passing from a foam-like droplet into a string-like ball, next to a sphere of sectioned rope “the chromosomes,” then to an orderly star-like arrangement “the aster,” now a separation into two starlets, and finally to a reconstruction of the original foam-like droplet of a nucleus. Several



*Tropical Plants*



*Northern Forest*

of these stages can be seen in the photomicrograph and the biologist finds that the number of chromosomes are constant for every species. For various reasons these chromosomes are regarded as the carriers of heredity by which characteristics are transmitted from parent to offspring.

## *Reproduction*

As cell-division is universal in its mode of procedure, so is fertilization in its ultimate analysis a process similar in all living creatures. The two sex-cells of plants, animals, or man must not only unite, but their protoplasm mixes and the nucleus and even the chromosome itself merge in producing a single cell—the fertilized egg—after which cell-division takes place, some chromosomes are thrown off, and a new organism begins its existence whose individual character is determined by the chromosomes retained. Fertilization is biologically a shuffling of the cards where new combinations of characteristics are made by a new combination of the many characteristics of the species.

## *Histology*

A study of the minute structures of the living organism shows many similarities. The stem of a plant, the spine of a sea-urchin, and the root of a human hair have similar structures. But the larger the organ for comparison, the greater become the apparent differences. Microscopically they are similar, macroscopically they differ. Yet even there a simple rule holds, the same kind of cells are modified for new purposes.

## *Anatomy*

In the plant kingdom all flowering plants fall into one large group, all non-flowering plants into three other groups between which there are

*Skull of a Bat*

several gradual transition families. The plants of the tropics or the northern forests have the same general arrangement of root, stem and flower, however greatly modified in the shape of their various organs.

In the animal kingdom we have likewise one large group without, another with a spinal column. Here again, despite the different appearances, we have similarities; all mammals have four extremities, be it the paws of the cat, the clawed or hoofed legs of the quadrupeds, the fins of a whale, the wings of a bat, or the arms and feet of man.

#### *Photographic Micrometry*

To study the minutest details of this vast field, to compare and measure, the photographic plate provides the most convenient record. Its results are staggering. For instance: in every drop of blood there are five million red blood cells—if we would place the small blood vessels, “capillaries,” of the human body length after length, they would stretch more than sixty-two miles—in the lungs are 750 million air cells whose lining membranes would cover an area of 120 square yards.

More practical purposes are served by micrometry in the identification of bacteria, of yeasts and of starch granules of different origin.

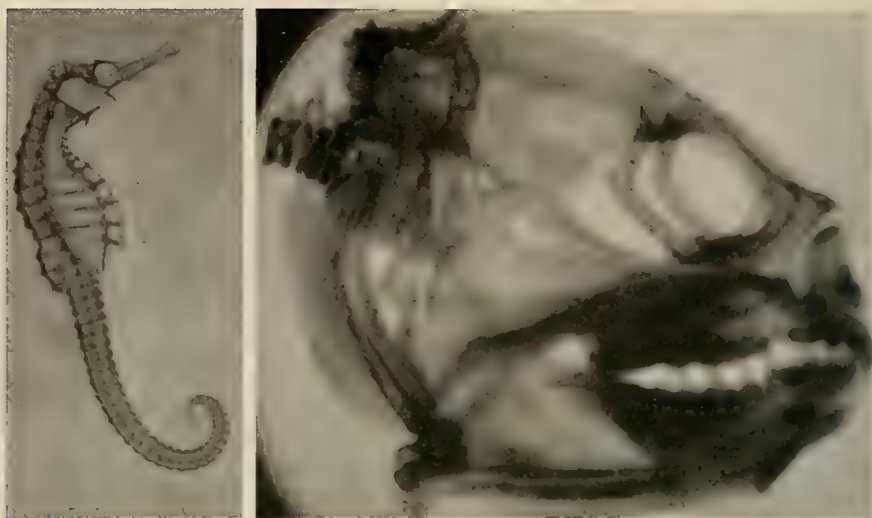
#### *Photographic Records*

Everyone is familiar with the photographic pictures of plants grown with and without certain fertilizing salts, or exposed to certain radiations. Lately the use of x-rays in stimulating growth is being studied and the results are made available by photographs. Generally the plant is placed against a ruled screen and photographed. The screen enables more accurate measurement of the different parts.

Likewise in animal experiments, as by feeding animals a diet rich or poor in vitamins, or in treating them with endocrine preparations, a photographic record of the animals before and after is extremely useful.

In the study of races, in anthropology, a photograph is absolutely essential, for no artist can draw as well as the plate can record.





*X Rays of Sea Horse and Head of Sea Wolf*

### *The Unity of Life*

In some of the above paragraphs we have stressed the similarities among living things. Yet, paradoxically as it may seem, we have never found two living organisms exactly alike. No one has succeeded in absolutely matching a single leaf of a tree, nor a fingerprint, much less chance is there of finding two organisms exactly alike. The biologist finds that these differences are due partly to inheritance, partly to surrounding conditions, principally food, habits, activity and temper, all of which contribute to inscribe upon man's face and body the story of violating one or the other of nature's rules.

We see then the many channels and adaptations which Life can follow. It unfolds itself in all three kingdoms of man and animal and plant. Everywhere it is seeking to find new and more complex developments or more efficient adaptations. Witness the results of plant breeding and animal breeding. And in past ages it has experimented in the development of huge monsters, too clumsy to survive, hence they died out and only fossilized remnants remain. Life is always producing new creations, due to the shuffling of the cards, and testing their efficiency by the way in which they can adapt themselves.

And in studying these phenomena the biologist has found an important rule or generalization, namely: that the progressive changes which an organism undergoes in its development to maturity resembles in general the evolution of the race; secondly: that these changes are speeded up in each successive generation, leaving time for further development.

Finally we come to the conclusion that Life needs the fourth dimension, that is time, for its unfoldment, eternity for fulfillment.

# Hooking Your Business to the National Campaign

By Fred Millis



*NOTE: Mr. Fred Millis is the head of one of America's great advertising agencies. He is the man that made "Say It With Flowers" of world-wide familiarity. And at this time he is handling the Two Million Dollar Campaign to sell photography to the masses. "Pictures Live Forever" and "Pictures Tell the Story" are not mere slogans. The millions of dollars will prove they do.*

*S. B.*

Now and then we find a photographer—though, thank goodness, they are few and far between—who seems to be under the delusion that the National Advertising Campaign is going to work some sort of subtle charm on prospects that will lead them, automatically, right to their doors without a particle of effort on their part.

Ask one of these passive photographers about the results of our national advertising and he will likely tell you that it "hasn't seemed to help business much." Query him as to how he is putting the campaign to work for his studio—directing the national effort to his doorstep—and you're pretty sure to find that he scarcely knows what it's all about.

Now, let's get down to sharp-pointed brass tacks: the National Advertising Campaign—your campaign—is going over. No question about it. From every section of the country come reports of definite, traceable results. Even the chap who doesn't do a blamed thing but sit in his studio and wait for someone to come along and push open the door, is going to obtain *some* benefit from the national advertising. And this will tend to increase with the cumulative effect of the campaign.

In a way, we can liken this national magazine campaign to the water company's main line that runs out in front of your home. The water is there, flowing abundantly, day after day, but if you want running water in your bathroom and kitchen, you've got to tap that main line and pipe it into your home.

And, in identically the same way, you must direct the magazine advertising—tie it up tight to your studio; put it to work for you—if

you are going to get the full value out of the money that is being invested.

No one realizes this truth more completely than the Advertising Committee of the Photographers' Association of America—the able men who have been trusted to form the advertising policies and plans for this great, arresting campaign. This committee, to a man, is heartily in accord with our plan to provide an abundant store of tie-up material—items that will exactly meet the needs of every photographer, regardless of the location or size of his studio.

This material is ready and waiting for you. To begin with, of course, we offer mats of newspaper advertisements, in various sizes—complete ads all ready to run in your local paper. Many of these advertisements use the same basic photographs, and the same theme as the national magazine ads. In all of them we use the slogan and identifying emblem of the Association. These advertisements are offered to you *without one penny of cost*. The entire production expense is absorbed by the campaign fund, because we *want* you to use these mats freely. We know of no better way to spend a portion of this money than in a localized advertising effort such as this.

The other advertising material featured in each issue of the *Pathfinder*, official organ of the campaign—items such as leaflets, folders, blotters, stationery, etc.—is all offered at considerably less than actual cost of production. In other words, your committee has met certain expenses such as art work, photographs, plates, etc., out of the campaign fund, in order to make you a very low price—far under any quotation you could get from an independent firm selling similar material. This has been done deliberately to encourage you to use this tie-up material—and use it liberally.

In using these tie-ups from Advertising Headquarters you have two distinct advantages. In the first place, you are receiving timely material that ties in closely with the national magazine effort. Your local advertising thus has the added force of the national campaign in your community.

The second advantage is that *you are getting something exclusive*. Not *every* studio can have this tie-up material, regardless of the price they might be willing to pay. It is reserved for subscribers to the national campaign. Only those who are helping to put across the story nationally can profit by this powerful localized program.

It is rather significant, I think, that many who are not entitled to this tie-up material and program are clamoring for its benefits, while here and there a photographer who has every right to the tie-up material is placidly passing up his opportunity.

How about *your* studio? Are you using *all* of the tie-ups? Why not look into the matter right now? Here's something you can't afford to pass up!



# Law For the Photographer

By M. L. Hayward

## WHAT MUST BE PROVED?

If a photographer gets 10 shares of corporate stock from a tardy customer, and the corporation wrongfully transfers the stock to X, the photographer, as a general rule, has a good case for damages against the corporation for making the improper transfer, but the corporation frequently defends such suits on the ground that the photographer has failed to prove fraud on the part of the corporation in making the transfer.

"I'm not bound to prove fraud—all I have to prove is that you did not exercise ordinary and reasonable care in making the transfer," the photographer contends, and the law is in his favor on this point.

A Massachusetts case along this line is *Loring vs. Salisbury Miles*, 125 Mass., 138, and there is a ruling of the United States Supreme Court to the same effect.

## BANKRUPTCY AND COLLATERAL

"Brown's insolvent and he owed me \$200," the photographer suggested. "He's paying 50%, and that's what the estate'll pan out," the receiver told him.

"I'll take my money right now, if you don't mind."

"You held 3 shares of Topaz stock as collateral security for the claim," the receiver pointed out, "so what you've got to do is to account for the stock, and then I'll pay you 50% of the balance."

"Not on your life," the photographer contended. "The bankrupt owes me \$200 and I'm entitled to my 50% of that. The collateral security is mine, and I'm entitled to whatever I can get out of it although, if I realize more than 50% out of the collateral, I might have to pay the balance to you."

This is a situation that can arise every day in the year, in connection with bankrupt or insolvent estate, and the importance of the point can be readily appreciated.

The law on this point is very conflicting, as the Georgia Supreme Court says, "the authorities are in irreconcilable conflict, and have been so almost from the beginning of recorded decision," and in dealing with such cases the American courts which have passed upon the question have laid down four distinct methods of dealing with the collateral security.

The first method which has been applied by the courts may be stated as follows:

The creditor is bound to first realize on his security or to credit the value of the security on his claim, and receive his percentage on the

balance, or he has the option of surrendering his security to the receiver and taking his percentage on the full amount of his claim.

This rule has been laid down by the Georgia, Massachusetts, Mississippi, Colorado, Rhode Island, South Carolina and Washington Courts, and has been embodied in the Bankruptcy Act and in the law of several states.

Then cases also arise where the receiver not merely claims the collateral, but actually gets his hand on it, and if so, the creditor, being entitled to the proceeds of it, may compel the receiver or trustee to pay over the amount received by him, as having been received in trust for the creditor.

Suppose, however, that the creditor does not prove his claim.

"Surely to be entitled to the benefit of the collateral the creditor is bound to prove his claim against the bankrupt estate," the reader may assume, but this is not the law, and the creditor if he wishes to remain outside, may pay no attention to the bankruptcy proceedings, and realize what he can on the collateral, without interference from the receiver, waiving of course, his right to share in the distribution of the estate as far as the balance is concerned.

Another interesting situation arises where a creditor holds two claims, one secured by collateral, and the other unsecured, the collateral pays the second claim—and leaves a surplus.

"I'll just apply the balance on my unsecured claim," the creditor suggests.

"No, you'll not, you'll pay it to me for the general benefit of the creditors," the receiver contends, and on this point the law is in favor of the receiver, on the ground that the two claims are separate and distinct, and the benefit of the collateral cannot be "switched" in this way.

Where the property held as collateral is exempt from the operation of the law, an interesting point arises.

"If I handed this security over to you, you couldn't realize on it, so I'm entitled to prove for the full amount," the creditor suggests.

"No, whether exempt or not you will get a certain amount of money out of it, and you've got to account for that money in making up your claim," the receiver maintains. On this point the U. S. Federal Courts have decided in favor of the receiver while the California Courts have ruled in favor of the creditor.

When the creditor holds to claims against the bankrupt and one claim is collateral for the other, he naturally wants to prove both claims against the estate.

"No—you've got to prove your real debt, and account for the value of the collateral," the receiver contends, and the receiver is right.

This brings us to the second method, and under this rule the creditor is allowed to prove for the full amount of his debt, but can receive dividends only on the actual amount due to him at the time the

## CAMERA CRAFT

dividend is declared, deducting from his claim such amounts, if any, as may have realized on the collateral before the distribution of the dividend.

This rule has been approved by the Alabama, Arkansas, Colorado, Iowa, Kansas, Maryland and Ohio Courts.

Under the third rule the creditor may prove for and receive the dividends upon the amount due at the time of proving or sending in his claim to the receiver, crediting as payments all payments realized from the collateral before sending in the claim.

This rule has been approved by the Illinois Courts. and Illinois seems to be the only state in which it holds.

Lastly and under the fourth rule, the creditor can prove and receive dividend upon the full amount of his claim at the time of the declaration of insolvency, regardless of any amounts received on the collateral security after the transfer of the assets from the bankrupt to the receiver, provided that the creditor shall not receive more than the full amount of his claim.

This rule has been approved of by the Connecticut, Louisiana, Michigan, New Hampshire, Pennsylvania and other courts.

Of course the first method is the important one in view of the fact that it has been written into the U. S. Bankruptcy Law, but the other rules are worth knowing as cases of Insolvency sometimes arise where the state courts are not bound by the Federal decisions.

## DREAMS AT DAWN

By Verne Bright

*Dreams at dawn—*

*Moon-flowers white*

*Fall from the sable*

*Bough of night.*

*Dreams blow down*

*From the ivory towers*

*Like petals drifting*

*Along the hours.*

*Wistful phantoms*

*Swiftly gone*

*On the wind's soft wings—*

*Dreams at dawn.*



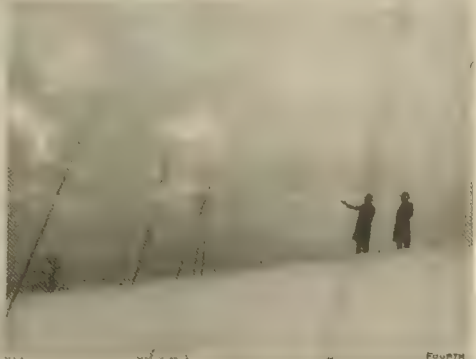
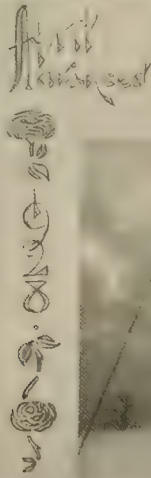
# CAMERA CRAFT



*First Award, Advanced*

*John T. Matsuda*

# CAMERA CRAFT



SECOND: *Horace Tyzack*

FOURTH: *M. A. Obremski*

THIRD: *Willard A. Van Dyke*

FIFTH: *Dr. Ralph Scobey*

## APRIL 1928 COMPETITION

### Advanced Pictorial

Miss S. Alanson  
Dr. Elwood Broughto  
M. A. Collaghan  
Miss T. Colton  
Amade Couviette  
Almado Devivre  
H. Edelman  
Mrs. F. O. Epper  
John L. Evers  
Peter Galton  
Otomatsu Ikuta  
Victor Jiricek  
H. Kira

J. T. Matsuda  
Torfinn Michaelsen  
Howard S. Niblack  
M. A. Obremski  
Dr. B. J. Ochsner  
Vicente C. Oramas  
Frank L. Rogers  
Dr. Ralph Scobey  
Dr. Max Thorek  
Elmer P. Trevor  
Horace Tyzack  
Miss Harriet Upson  
W. A. Van Dyke  
Alfons Weber

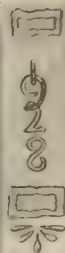


*First Award, Amateur*

*Mrs. W. F. Eldridge*



# CAMERA CRAFT



APRIL  
AMATEUR  
XL



SECOND: *Miss Y. Inagi*

FOURTH: *Allen Frazer*

THIRD: *Louis R. Murray*

FIFTH: *T. Noguchi*

## APRIL 1928 COMPETITION

### Amateur Pictorial

P. F. Ahn  
Johan Alber  
John J. Becker.  
Mrs. C. J. Bundy  
Malcolm Carpenter  
A. W. Clark  
Louis Dantzic  
D. Danzero  
J. Desabayla  
H. Dietrich  
Mrs. M. Dutton  
F. Earl  
Mrs. W. F. Eldridge  
P. Y. Empaynado

Allen Frazer  
Mrs. S. P. Fream  
Miss N. Garrett  
J. P. O. Gorman  
Miss Winifred Graham  
Malcolm Greasley  
Henley H. Hall  
Arthur Higgins  
J. Y. Imatsuki  
Miss Y. Inagi  
Frank Inman  
O. Johanson  
Robert L. Klinner  
T. Kojima

I. S. Levitt  
Rene Lorre  
L. J. Mlask  
Louis R. Murray  
T. Noguchi  
S. B. Priest  
N. F. Rayfield  
D. W. Ross  
K. Schimizu  
Robert S. Smallwood  
Elton A. Smith  
T. K. Tsukane  
Arthur Warren  
T. M. Waumsley



### It Is Good To Be a Real Fellow

Some time ago we took infinite pleasure in speaking of Billy Alcock as we felt toward him. To our surprise letters came in numbers from all parts of America and two from England expressing as great a pleasure as our own and adding encomiums. We say, to our surprise, but really we should not have been at all astonished for the reputation that gained him the invitation to judge the Royal Photographic Society's Salon, the qualities that made for that reputation are known as well to others as to us.

The above poster impression was made for us by Mr. A. D. Mills Jr. of San Francisco. Mr. Mills never met Billy but likes him on general principles, and to please himself and us, did the drawing from the reproduction which appeared in *Camera Craft*. All of Bill's friends will agree the artist has caught every salient feature of the Alcock we love and with the broadest effects has achieved that rare consummation.

The deduction is obvious. Alcock in a decade of pictorial activity has never offended by innuendos, never hurt by malicious criticism, has helped whenever and however he could and might, and in his quiet, unobtrusive way has been one of the great factors for better photography in these United States. However this tribute sounds to some, it will seem inadequate to those who know him best.

### A Valuable Suggestion to the Profession

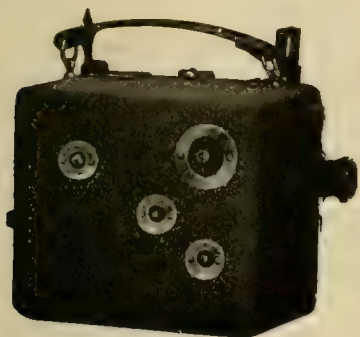
The historian of a large insurance company recently came to us with a problem. It was necessary to fix the year in which a certain picture had been taken and neither the maker's name nor the date were anywhere to be found, on print or mount. At his suggestion we pass this on to our readers.

Why should not every portrait and commercial photographer imprint not only the year but the month and date on each print? The matter is not only of interest to historians but to members of families, business men, and that posterity which comes into possession of the pictures when the originals of them have gone. Surely, even a portrait of no chronological importance in itself gains even such importance when its time is placed.



### The New Cine Nizo 16

This machine is a somewhat radical departure from the 100 ft. cine cameras, but it has the exceedingly important advantage of being much smaller, lighter and cheaper, retailing for only fifty-five dollars.



In order to facilitate the finishing of the film an efficient 16 m/m printing machine will also be sold. This will be at a price within the reach of every laboratory.

The 33 ft. film length is ample for every average scene, and much more than the average length of any scene made with the professional cameras.

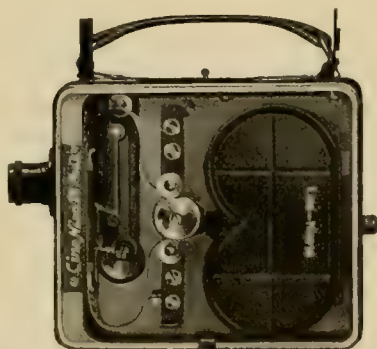
The Cine Nizo 16 B has two different drives; first a powerful spring motor that has only to be wound twice to turn off the entire film. The mechanism is extremely smooth and without the least vibration and so constructed that the first to the last frame has exactly the same exposure. A unique and most important feature that is found in no other 33 ft. camera in the world is the possibility of changing from the motor drive to the crank drive at will and instantly. For there is also a hand drive for one picture per turn as well as normal speed, allowing one to alter the exposure or speed of the camera instantly without making a previous run off the spring motor. This feature of changing at will in every moment from the spring

to handle drive is entirely new and only with this new Cine Nizo 16 B movie camera.

The exposure release may be locked in position and the camera placed on a tripod or other rigid support so that the operator appears in the picture if desired.

Its weight is less than three pounds, including the spring motor (which is not detachable from the camera), and its size is  $4\frac{1}{4} \times 4\frac{1}{4} \times 3$  inches.

The Cine Nizo 16 B is equipped with the best available lenses, i.e., with the Jos. Schneider & Co. f:3.0 lenses as well as other good makes. Faster speed lenses will also be available later. A portrait attachment is furnished for use with fixed focus lenses if these are preferred and used.



*Interior view. Parts fully explained in booklet to be had from the agents.*

The direct view finder is of the most approved type and extremely accurate. Its footage indicator is easily set from the outside.

This camera is sold in the U. S. A. only by Burleigh Brooks, 136 Liberty street, New York City, and will shortly be available at all dealers with the necessary supplies, and movie enthusiasts are urged to see it at the first opportunity.



## Telephoto Lenses for the Cine-Kodak f:1.9

Owners of the Cine-Kodak Model B with f:1.9 lens equipment need no longer be confined with only the regular lens on the Kodak which is of short focal length. The Wollensak Optical Company is now making a series of telephoto lenses ranging in focal length from three inches to six inches which can readily be adapted to the Kodak f:1.9. This company has specialized in photographic lenses and shutters for almost thirty years and has for some time been making telephoto lenses for the Filmo, Victor and DeVry cameras and, by modifying the mechanical construction, permits them to be readily attached to the Cine-Kodak f:1.9 also.

To fasten a telephoto lens to the Cine-Kodak f:1.9 all that is necessary is to remove the three small screws holding the f:1.9 lens to the Kodak and fasten the telephoto lens in its place and in exactly the same manner. To facilitate the changing of lenses, large thumb screws are supplied with the telephoto which eliminates the necessity of carrying a screw driver in the kit.

A telephoto lens offers many advantages in movie making. Very often the desire to photograph an object at a distance is discouraged when confronted with the fact that it is almost obscured when projected on the screen. A telephoto lens magnifies the equivalent of its focal length and makes possible the photographing of distant or near-by objects and in such proportions that make them appear as close-ups.

### A Speedy Lens

Towards evening when the sun sinks away and dusk comes on, or on the camping trip in the woods where the dense foliage does not admit the sunlight, movies can still be made, but the camera should be equipped with a fast lens. With the camera so equipped, there need be no fear of making motion pictures of poorly-lighted interiors or on dull, cloudy days.

The Wollensak Optical Company, of Rochester, N. Y., have recently placed on the market the f:1.5 Cine-Velostigmat which produces films that sparkle with snap and brilliancy when projected many

times their own area upon the screen. These lenses are made in one-inch and two-inch focus for 16 m/m and standard size motion picture cameras.

The amateur as well as the professional motion picture operator desiring a lens of general utility will find the Wollensak Cine - Velostigmat f:1.5 an admirable choice and a mighty fine investment where the ultimate in movie making is desired.

A new catalog has just been published by this company and describes in detail the lenses and accessories for the amateur movie cameras. You can get your copy for the asking.

### Miracle Movies

Have you ever considered the startling effects that can be worked into your films by the simple means of stopping the camera while new characters or "props" are introduced, inanimate objects are moved, or an actor makes a change in his costume or disguise? The possibilities are extremely interesting, and are limited only by the imagination of the operator.

For this work, the camera must be mounted on a tripod so that its position is sure to remain fixed. Suppose your story involves a young man who is lonesome for his sweetheart. He registers his sad, lonesome condition and a title will later be made to read "I wish Peggy were here!" This title is cut into the middle of the "lonesome" scene. Then, as the sad one is most obviously despondent, stop the camera, pose friend Peggy before him, smiling a welcome, and then start the camera again to record his astonishment and the joyous reunion. It is important that the man in this case remain perfectly still while the camera is stopped, so that no break will be apparent in the finished film.

The effect is surprising indeed, for Peggy appears as out of the thin air, just when she is wanted most. Later she can be made to disappear in the same way.

If your scenario calls for telling the story of a dream, it can be filmed by the same method, those seen in the dream appearing suddenly, enacting the story of the dream, and disappearing as they came, while the dreamer awakes.

## CAMERA CRAFT

The hungry man's dinner can be made to appear or disappear by stopping the camera and shifting props into or out of range of vision of the camera. There is no end of stunts to be accomplished in this easy way, and all of them will add enlivening variety to your films. Try it—you'll be pleased with the results and your films will gain in interest to others.

—Filmo Topics.

### Reflectors

Better motion pictures are often obtained when the illumination on the shadow side of the subject is increased by the use of reflectors. Strong light on one side of the subject and a reflected light on the shadow side will give to the picture that roundness so necessary for a more nearly stereoscopic effect.

The professional motion picture director considers the reflector almost as important to the making of good pictures as the camera, and few of his scenes are taken without the aid of this instrument that softens the shadows and gives pleasing illumination to the subject.

The majority of professional reflectors are made of wood or heavy cardboard upon which is glued an even layer of tinfoil. But for home movie use, all you need is a sheet of pure white cardboard about 30x40 inches, or larger, or a mirror or white linen sheet.

Whatever the expedient, place it at such an angle that the light is reflected where needed to soften the shadows. Be very sure that it is out of the range of the camera, so that it will not appear in the picture.

Reflectors of this kind are particularly valuable in making interior scenes. With the subject close to a window, the reflector should be placed on the side away from the source of the light, so that the reflecting surface will direct the rays into the shadows.—Exchange.

### Goerz Cine Lenses

The C. P. Goerz American Optical Company announce a most tempting line of Cine Lenses, f:2, f:2.7, f:3 and f:4.5, named respectively Cin-gor, Kino-Hypar, Dogmar and Telestar. These are made in precision focusing mounts for the Filmo,

Eyemo, Victor and De Vry cameras. Printed matter on request of the company at 317 East 34th street, New York City.

### The Cinophot

Probably no light meter on the market has the immediate sale and enjoys as continued a popularity as has marked the appearance and exploitation of the Drem Cinophot. The Justophot had already established a standard of accuracy for such devices and naturally enough its sister, the Cinophot, came into a grounded prestige. These instruments do what they are expected to do and with ease.

### Dallmeyer

Nowadays the Cine Camera is holding the center of the stage and having graduated from stock lenses on his motion picture camera, the amateur emulates the professional and wants a battery of lenses of different focal lengths and speeds. For him Dallmeyer has perfected a series which is fairly called The Perfect Combination. Write Herbert and Huesgen Company, 18 West 42nd street, New York for information and prices. It will pay you.

### A Cine Service

The Bell and Howell Company have shown the world what real service means. In a personal letter to every known owner of a Filmo they have sent an offer of a sort of correspondence school in the use of the instrument and a generally helpful course in the remedy of faults and solution of problems. Verily, modern merchandising is not only the selling of goods but the making of friends.

Such things do more to justify big business than most realize.

### X-Ray Moving Pictures

In England they have been showing motion pictures taken with the aid of the X-ray. Bone movement and the beating of the heart at normal speeds have both been shown vividly on the screen. The uses for educational and diagnostic purposes are at once apparent. It may even be there are industrial uses; perhaps some scientist may some day watch just what is happening inside a cow when grass goes in at one place and milk comes out at another.



## Association News

ALVA C. TOWNSEND, Lincoln, Nebraska, *President*  
CHAS. AYLETT, Toronto, Canada, *1st Vice-president*  
D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*  
JOHN R. SNOW, Mankato, Minnesota, *Treasurer*  
J. W. SCOTT, Baltimore, Maryland, *Chairman Commercial Section*  
PAUL TRUE, New York City, *Chairman Manufacturers Bureau*  
L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*

### News

The question has been brought to the attention of our Board of Directors from several different sources as to whether it will be possible for photographers who are not members of the Association to exhibit at the Convention, either directly or through their local Association.

The question has also been brought up as to whether photographers who are not at the present time members of the Association, or subscribers to the advertising campaign, can attend the Convention, and secure admission to the Association by paying some nominal sum.

Our Board of Directors call attention to the change in our by-laws that was passed at the New York Convention last summer, which reads as follows:

Active membership shall be extended as follows:

(a) To studios (whether ownership is by individual, partnership or corporation) and to any professional photographer actually engaged in production of photographs as a vocation, having subscribed to the code of ethics, and, if financially able, to the co-operative advertising campaign of the P. A. of A.

(b) To individuals who are managers of photographic departments of institutions, corporations or industrial firms.

This means that all of our Association activities, including the Convention, are open only to our membership—that those who attend the Convention who are not members must subscribe to the above ruling before they can secure admittance.

The reason for this ruling is becoming more and more apparent every day. For instance, during the month of February, we have received twenty-two applications for membership.

Out of these twenty-two inquiries, only four have become members. This means that the Association has got to be constantly on the alert to protect the 3800 photographers who have subscribed \$1,600,000 from those who want to become members at this time by paying a nominal membership fee of \$5 or \$10, and secure all the benefits of the Association activities.

### The Winona School

Practically complete arrangements have been made for the Winona School this summer, and are more extensive than ever before.

The most important and interesting announcement is that of the establishment of a School of Illustrative Commercial Photography under the direction of Mr. Charles Kanarian of New York City.

The school will be held for two weeks from about July 23rd to August 4th, and will be devoted exclusively to the illustrative side of commercial photography. Mr. Kanarian will have an able corps of instructors to assist him, whose names will be announced later.

The tuition will be \$50 for the two weeks. The class will be limited to forty students.

The course of instruction will consist of a series of lectures and demonstrations on the illustration of practical advertising problems. This will give to advanced workers the opportunity to get practical instruction in this most interesting branch of commercial work.

There will be lectures in addition by advertising experts, photo engravers, artists, etc., as a part of the course.

Director Towles has a number of interesting announcements to make in re-



## CAMERA CRAFT

gard to the portrait section of the school, which will be held the four weeks starting August 6th to August 31st.

The most important announcement is the fact that the Trustees have secured the services of Earl Williams of Lincoln, Nebraska, to have complete charge of the printing and dark rooms. The manufacturers will assist as in years past, and will work under the general supervision and direction of Mr. Williams, so that there will be complete continuity of instruction.

The trustees feel that this department of work is of utmost importance to the student, and are tremendously pleased that Mr. Williams has consented to act as an instructor.

It is decided also to limit the course of

instruction for 1928 to one hundred students. The price of instruction will be fifty dollars (\$50.00), as it has been in years past. By limiting the course to one hundred students, they will be able to get far more individual attention than during the past year. It is of decided importance that those desiring to attend the school, send their registrations in at the earliest possible moment.

At the school last August, Mr. P. H. Kantro of Portage, Wisconsin, presented a scholarship to the student who made the greatest progress during his attendance. The trustees have awarded the scholarship to Mr. Orlin Kohli of Wheaton, Illinois.

Mr. Kantro announces that a similar scholarship will be awarded at the school during 1928.



### Master Photo Finishers of America

A. E. Block, President.....	27 Von Hillern St., Dorchester, Mass.
Fred. Mayer, Vice-President.....	Portland, Ore.
Wm. J. Meuer, Treasurer.....	212 State St., Madison, Wis.
Guy A. Binzham, Executive Manager.....	Box 1020, Rockford, Ill.

#### Territorial Vice-Presidents

South-Western States: W. F. Honnen.....	1240 S. Main St., Los Angeles, Calif.
North-Western States: C. M. Coffey.....	284 N. Commercial, Salem, Ore.
Mid-Western States: Chas. W. Lynn.....	3917 Orleans Ave., Sioux City, Iowa
North-Central States: John H. Seamans.....	7052 Jeffery Ave., Chicago, Ill.
Central States: E. L. Hurlburt.....	315 St. Louis St., Springfield, Mo.
South-Central States: J. A. Hammond.....	Box 650, Meridian, Miss.
South-Eastern States: Elon C. Robison.....	105 Third St., N., St. Petersburg, Fla.
Great Lakes States: C. P. Phillips.....	6930 Gratiot Ave., Detroit, Mich.
Dominion of Canada: W. A. Taylor.....	274 Carlton St., Winnipeg, Man., Can.
Central Coast States: Wm. H. Eichner.....	1210 "G" St., N.W., Washington, D.C.
New Jersey—New York City: J. G. Taylor.....	24 E. 23rd St., New York City
New England States: H. K. Atkins.....	Middleboro, Mass.
Mid-Eastern States: M. J. Koch.....	535 Penn Ave., Pittsburgh, Penn.

### Take-a-Picture Week and the Finisher

Perhaps in nothing else so much as this national movement is proven the immediate connection of Photo Finishing and the other branches of photographic industry. When the portraitist feels inclined to arrogate an aristocracy, may he be awakened to the realization that it was not until amateur photography and the millions of snapshooters became picture conscious that he was able to get his present prices or maintain the standard of elegance shown in his modern studio. When the manufacturer induced by a momentary aggravation feels that he is being compelled to produce according to the demands of the finisher, let him be informed that a most respectable volume of his products are consumed by a public that should probably not use the camera if the Finisher were not handy. And the dealer should gather his own deductions from the same facts.

And we Photo Finishers should not become too chesty, either. We have partly created, mainly inherited, a great industrial opportunity which we have altogether too lightly considered and far too little improved. We are factors in the sale of cameras, negative material, and supplies generally. Do we function to anywhere nearly our approximate possibilities? I think not.

If this great association of ours is to make more business, better business, for ourselves and the trades to which we are allied we must get back of exploitations like Camera Week. The name given as a heading was purposely so written that the force

## CAMERA CRAFT

of habit might catch your eye and this correction fix the changed name on your mind. It is not to be Take-a-Picture Week hereafter but National Camera Week.

Such national movements are but hooks on which to hang a thousand intensive activities. Prospects and possibilities are created and it is up to us to realize them and bring them home to our respective establishments. An association can hardly be expected to take customers by the hand and drag them to your door. Organizations extend, widen, and produce markets. We avail ourselves of that and realize in proportion to our energy and enterprise.

Customers made are not customers kept. A camera sold has not made a photographer. Good work, as close as we can get to one hundred per cent of what is possible in the work that comes to us, will encourage the camerist to continue, will intrigue him into taking more pictures and getting more prints from each negative.

The moral I would point is that we must stand by our association in every way, not least of which is the making of our insignia a warrant of good work and square dealing.

You may say that I am not a Photo Finisher and don't know whereof I speak. Well, it has been said I am no poet but I do write poetry, you know. And is it not possible that I be a Finisher from the heart if not the pocket and that I may know as much as many of you and more than some of your business? Under any circumstances leave me out of consideration and get this, the truth is the truth from whatever source it come. And this is so true that it stings:

Be a Master Photo Finisher by proving you are first, a Finisher; second, a Master at it; and third, that you are proud of being a member of an organization of your peers, all MASTER PHOTO FINISHERS.



### Pacific International Photographers' Association

Embracing Alaska, Alberta, Arizona, British Columbia, California, Hawaiian Is., Idaho, Montana, Nevada, Oregon, Utah, Washington.

WILLIAM M. BALL, President; Corvallis, Oregon



CLAUDE F. PALMER

#### Claude F. Palmer

A member of the Oregon Division of the Commercial Section, Mr. Palmer, is not only an active photographer tied to the interests of the craft by experience and personal interest, but a loyal association man and one possessed of that literary quality which will permit him to make a readable and interesting publication for us.

He is free from any element of factionalism and has always proven himself big in conception and energetic in execution. Back of the membership's hope for the best is a fixed belief that their hopes shall be realized. Those who have not had the pleasure of meeting him in person will accept this as an introduction. Look him over and shake hands with the Editor of the P. I. P. A. Hi-Lites.

# CAMERA CRAFT

## Our Bulletin

That a regular, self-owned and controlled publication is indispensable to the growth and effectiveness of our organization is the belief of the Board of the P. I. P. A. in establishing our new bulletin called P. I. P. A. Hi-Lites.

Our magazine, which will appear first early in March, will be issued monthly and besides going to members will be sent for a number of issues to every portrait and commercial photographer and to all photo finishers on the Pacific Coast whose names are available. We shall start with eight or more pages, size 8x11, and will carry a limited amount of advertising by manufacturers and dealers.

It is the desire of the Board and the intention of the staff to make Hi-Lites

truly a professional photographers' magazine. To bring closer co-operation between the three branches and the workers therein, to carry news of associations and individuals, to aid the P. A. of A. and other agencies in their work of business building, and specifically to forward the plan for "Certified Photography" as adopted at San Francisco in 1925—all these are the means by which we hope to be of help in making ours a better profession in this territory.

The splendid co-operation which Camera Craft has extended the Association in the past and the encouragement this magazine has given us in our new venture are heartily appreciated. We thank Miss Reed and Mr. Blumann and only hope that we may live up to their expectations.—Claude F. Palmer, Editor P. I. P. A. Hi-Lites.



Ye Editor Retaileth Newes of Ye Profession and in Quaint Italics Titillateth Ye Sphynx with Hys Quill

## Northern California Association

The regular monthly meeting of the Photographers' Association of Northern California was held at the Bellevue Hotel Monday evening, February 20th, with President Lancaster presiding. Twenty-five members sat at table for the, as usual, splendid dinner and more came later for the program.

The questionnaire postals brought the following results: 318 were sent and 27 replies were received—an average 8½ per cent interest. The suggestions were that meetings be held in valley towns and more frequently on the east side of the bay. General interest cannot be gauged by this campaign for the reason that the replies were fewer than the average attendance during a current year.

The Chair, calling for the election of officers, Sergeant John P. O'Callaghan moved that the present incumbents be re-elected and that the Secretary be instruct-

ed to cast a unanimous ballot to that effect. On second by Holly Todd the motion was put and carried.

The question, "Does the Association Benefit Photographers?" was discussed by George P. Gibson, Mabel Spencer, and Mrs. Tracy Webb. Each dealt with the matter from a different viewpoint and their thoughts were interesting and instructive.

"What Kind of Programs Are Most Constructive," was the next subject for discussion and Frank Flannery, Beulah Ross, Mabel Spencer, George P. Gibson, and Mrs. Tracy Webb advanced many valuable suggestions, the one most commonly agreed upon being that demonstrations were most popular.

L. P. Carlton of the Lafayette Studio dealt with the question, "Why I Do Not Come to the Meetings," and his discourse seemed to show that this meeting had converted him to the advantages of at-



tending for he expressed a wish to know how to bring more of the profession to regular attendance.

"What Is the Attitude of Photographers Toward the Association?" brought Norman Siller to his feet with a logical and substantial argument. He deduced that too great a satisfaction with existing conditions was leading to reduced enterprise and that the work of the association was neglected from that false content. Chauncy McGovern suggested a change of night. Many other bits of advice were offered which gave the Executive Board food for thought.

R. J. Waters, that dear, grand old man of photography, then gave us a half hour of real, undiluted pleasure with his lantern slides of early California views. The side-lights on Mr. Waters' boyhood days in pioneer times and amidst these very scenes added to the human interest.

As the members lingered after adjournment the outstanding feature of the discussions seemed to be accepted as being Miss Spencer's statement that she had been able to positively trace an access of business to the Palace Hotel Exhibit and the Spencer and Stolte show at the Hotel Alameda. This and her conviction that the association had a natural broadening influence and a stimulating effect on those who not only attended but took active part in the doings gave all there a stronger leaning toward their organization. May the future qualify the good resolves of this night.

## Oscar Hansen, The Bear

By indirect information we recently learned how big a man can be in his business. Hansen has been accused of a hundred offences, none so flagrant as, and virtually all consisting of getting business away from competitors. Now he proves that it is not cutting or unfair preferentials that get him his trade, for it is said he offered to make the enlargements free for one of his most aggressive competitors who is suffering from the free enlargement evil in his territory so that he, too, may offer free enlargements and meet the unfair campaign. There are plenty of laws governing combinations to fix and maintain prices and it would seem only

just to uphold prosperity in trade and to prohibit the restraint of trade by making it illegal to give service or merchandise free. Someone, somewhere must be stung by such things. There can be no free merchandise or service. The public pays somehow. More power to you Hansen and may you continue to help the craft as you grow.

## S. Alcorn, Friend of Camera Craft

In an indirect way we learned that Mr. S. Alcorn, head of the photographic department of Burroughs Wellcome and Company, U. S. A., Inc., has been a constant reader of Camera Craft for fifteen years and has expressed himself as an admirer of our magazine. We are more than gratified for we know this gentleman to be a discriminating judge and frank critic, and certainly one who knows what is good in photography.

## East Bay Commercial Photographers' Club

On the evening of February 29, the above live and lively organization held an annual Past Presidents' dinner which was followed by a Leap Year dance. The repast was good, with apple pie on special request, the music up to the standard of the Alpine Hotel, and those who attended had a fine time, as always.

Worthy President Kelly had suffered a grievous loss in the family and was absent. Past President Ford Samuel could not come on account of the illness of Mrs. Samuel, and several others were kept away by equally important and deplorable circumstances. They were seriously missed.

Miss Estey, Miss Malcolm, and Mr. Sunderland were the soloists of the affair and acquitted themselves nobly. Mr. Sigismund Blumann officiated as master of ceremonies but found himself without duties to perform for there were no ceremonies. Everybody proceeded to have a good time informally and succeeded.

## M. A. S. Photographers' Association

The Photographic Salon of the Middle Atlantic States Convention with the projections of the important pictures and analytical criticism by Yarnell Abbott will undoubtedly be the most important feature at Philadelphia. But closely following, will be the visit on Monday to the

## CAMERA CRAFT

new museum, a \$15,000,000 structure in the Parkway.

The 43 paintings of the eighteenth century form one of the most notable landscape and portrait collections of the early British school, but the museum contains, besides pictures and statuary, all the productions of man's hand with the beauty inevitably imparted by handwork in furniture, textiles, tapestries, rugs, pottery, glass, and metal work in bronze, iron and silver. Objects of use as well as beauty, corresponding to those which surround us in our daily lives.

The floor plan is a veritable Main Street, exhibiting a pageant of the evolution of Art from the beginning, flanked on either side with 37 period rooms reproducing the paneling, fine furniture, metal work, tapestries, window draperies and upholsteries of the various periods.

Briefly, it is a very temple of inspiration to creative work, both in design and technique, with a direct appeal to each and all, from the humblest layman to the greatest artist.

Mr. Fiske Kimball, the director of the museum, and Mr. Theodore M. Dilloway, director of art in the public schools, will address the members at the museum, Monday, April 16.

### Tony Babb

He flitteth like the gentle butterscotch from flower to flower. Now in the Southern metropolis where the population doubles every other year and the cafeteria had its inception, now in San Francisco where they strain to emulate the growth of their sister city and nourish a few cafeterias of their own, and again in Seattle, where they just saw wood and say nothing, growing all the time and trying to dry out between showers. He is a busy but ever smiling Tony. He cannot come too often and he never stays long enough to suit us.

### Commercial Photographers of Los Angeles

Our President, J. H. Mott, called us to order at 8:15 p. m. at B. B. Nichols, Inc., 731 South Hope street, after a very well attended dinner at the Masonic Club.

The Association presented Mr. Jud Hawthorne with a beautiful upholstered occasional chair in appreciation of his last

year's services as secretary and treasurer of the Association.

There were a number of very interesting and instructive things taken up at our meeting, among them the getting together and sending of our annual exhibit to the National Convention at Louisville, Ky., to be held in March. Clifton, Barnes, Luckhaus and Hawthorne were appointed on the committee. We were all requested to get our best pictures of the past year.

There were members appointed on a committee to go to the high schools where youths were being taught photography and offer to supply members of our association who would lecture at least once each week on photography and incidentally teach them association details, so when they got out into the world and began their art career they would know there was an Association where they could go for ideas and help, also they could be taught the good of association with others.

Three new members were elected to our Association.

Mr. Herzberg gave us a very interesting talk on Micrography. We were all very much interested and instructed. It is so interesting to know what the other fellow does, and how he does it. It helps us talk our branch of photography better.

### Mrs. and Mr. C. F. Hutchison

Two very prominent members of the big E. K. family passed through this city on a honeymoon trip to Australia. In widely different capacities Mr. and Mrs. Hutchison have been with the Eastman Kodak Company for many years and long tied to that common interest they are now permanently tied to one another. Good Luck, Long Life, and such future congratulations as may be justified from time to time.

### Leslie T. White

On a neat card Leslie T. White announces the removal of his studio to more spacious quarters at 431 Chestnut street, Ventura, California. Mr. White has established his reputation for artistic and conscientious work and his success is assured and deserved. May his prosperity increase beyond any increase of ground space and his business outgrow his establishment often.

## G. Warren Howe

A modest, active fellow introduced himself to us and left us all too soon, but behind him remained a good aftertaste of what the profession could offer a fit man and what a fit man could get out of his profession. Mr. Howe has opened a Log Cabin Studio in Miranda, Humboldt County, California, on the Redwood Highway, in the midst of the big trees, and proposes to make pictures to please himself and such possible buyers as share his taste. After many years of arduous work pleasing customers he is determined to try photography for his own pleasure and we believe he will make it pay.

## Arthur Kales

The flurry of pictorialistic politics, the vogues of amateur pictorialism come and pass but Kales quietly goes on in his own way, making pictures. New names appear, rise to prominence and drop out, but Kales maintains an even superiority and probably ranks today, as he did some years ago, as one of the leading pictorialists of the world. He's an ornery cuss. A severe critic, an unmerciful pricker of egotists, an outspoken hater of hypocrites, but mighty willing and helpful when approached in the right spirit. Lord, grant us more men to work for the cause and less for themselves.



Edited by H. D'ARCY POWER, M. D., F. R. P. S.

### The Technic and Pictorialism of Lantern-Slide Making

I prefer to fix the plate in hypo acidified with potassium metabisulphite. The temperature of the hypo bath should be kept at 60 deg. F. or thereabouts, as it does not do to transfer the plate from a high-temperature developer straight into too cold a bath, as there is danger of the gelatine reticulating.

After fixing and washing—both operations should be very thorough, in view of possible after-treatment—the slide should be examined in a good light, as these developers frequently leave silver surface markings. In that case all that is necessary is to hold the plate under the tap, and, taking care that there is no grit or splinters of glass on the surface, rub the marks off gently with the tip of a finger. If left until the slide is dry they are frequently difficult to remove, and may require to be cleared with weak hypo and ferricyanide.

When the slide is dry and apparently satisfactory to a visual inspection, it is advisable to test it in the lantern. It is a good plan to keep a few slides of really

fine quality to form a standard against which to compare the new slides.

The question of reduction or intensification will now come in.

For reduction there is nothing more useful than Farmer's reducer—hypo and ferricyanide. Nothing more than a mere clearing should be attempted. If any substantial reduction is necessary, it is better to throw the slide away and make another. Reduction almost invariably means spoiling the color, especially with brown tones. The reduction of thiocarbamide slides is a very delicate matter, and unless the operation is done very cautiously and with a very weak solution the image will be irreparably damaged before the action can be stopped. Local reduction with a brush and in skilled hands gives us an amount of control quite as great as do the controlled printing processes. For the purpose, it is advisable to have a slide that is just a little too dense in the deeper deposits to allow for unavoidable slight reduction in the shadows, and before work is started the slide should be hardened in a formaline bath and allowed to dry, for the hypo-ferricyanide seems to attack the gelatine after a few minutes.



## CAMERA CRAFT

Intensification gives us another useful method of control. The most generally useful form of intensifier is the acid-metol silver one, of which this is the latest formula that Dr. Mees gave us:

A—Water .....	20 oz.
Metol .....	88 grs.
Glacial acetic acid.....	1 oz.
Citric acid .....	176 grs.
B—Silver nitrate .....	1 oz.
Distilled water .....	20 ozs.

Contrary to the printed directions, I find the most efficacious manner of using this is to take  $\frac{1}{2}$  oz. solution A, 10 to 20 minims solution B, and  $\frac{1}{2}$  oz. warm water, so that the working solution is 75 to 80 deg. F.

This intensifier has the unique property of intensifying slides in any color without altering the color, provided certain conditions are observed. The intensifier must be mixed immediately before use, and must be applied to the dry slide, and its action must not be continued for more than  $1\frac{1}{4}$  to  $1\frac{1}{2}$  minutes. If allowed to act longer than that time, it will probably begin to produce a blue color (usually in patches), and, continued long enough, will result in a dense blue slide. It is, in fact, a physical developer, and can be utilized as such in the following manner: When developing a slide with a normal developer, stop development at any stage after the image has begun to appear, fix and wash thoroughly, and then continue development with this intensifier. Good blue and blue-grey slides can be obtained thus of a color rather different to that of the thiocarbamide slide. The mixed intensifier decomposes in about a couple or three minutes after mixing, and must then be thrown away and fresh substituted. It also decomposes instantly if any hypo or alkali is present, and its staining powers are unrivalled, so that great care has to be taken to prevent its getting on the hands or clothing. It deposits silver freely on the dishes and measures used, but this is quickly removed with a little acidified permanganate solution or strong hypo and ferri-cyanide. The stains are not so easily removed from one's hands, and if you value your appearance you will exercise due care. Unless the operations of fixing and washing have been properly carried

out, this intensifier will cause brown stains in the plate, so that it is a good index to the thoroughness of our manipulations.

As soon as intensification is complete, the plate should be washed in running water for a minute, and then transferred to an acid-fixing bath for five minutes. If this is not done, stains are likely to develop in the course of a short time and ruin your slide. An hour's washing in water completes the operation.

We should now have a slide of proper contrast and density. Again we pass it through the lantern, and examine it carefully to see what defects require spotting out, as they are more easily detected in this way than on the slide itself. The slide-maker has to insure that his spotting is of the correct density for projection, and that it will appear of the right color.

A pigment such as water-color paint should never be used unless unavoidable. The pencil is the proper tool, except in extreme cases. Of course, when holes go down to the glass, or when the film has been torn away and there is only glass to work on, the pencil is useless, and some form of pigment is necessary. In this case the brush should never be wetted with the mouth. To do so is to transfer a colony of germs to the gelatine where they flourish exceedingly, and in the course of a year or two we begin to wonder how it is that the spots in our slides grow larger. The brush should be wetted in a weak solution of formaline.

All work on the slide should be done with the aid of a powerful magnifier of the reading-glass type. The pencils for use should comprise a 9H, 6H, 4H and 2H. The points must be kept long and sharpened to a needle-point on a block of very fine glass-paper such as is sold for the use of artists. The point of the pencil must be sharp, not only to the eye but when examined through the magnifying glass, and you will find that this means that it must be sharper than the average needle. A very sharp-pointed needle mounted in a paint-brush handle also makes an effective tool for small spots. In either case the sharp point makes an indentation in the gelatine that prevents the light from passing through, but its effectiveness can only

be gauged in the lantern, as it is hardly perceptible to the eye, and is therefore deceptive. It is only useful for skies or the lighter parts of the picture. Where the deposit is thicker, powdered black lead applied with a wet fine-pointed sable brush or water-color paint to match the color of the slide may be necessary to get the requisite opacity. It will frequently be found that the pricking of the gelatine has produced too much opacity, and the result is a dark spot. This may be lightened to some extent by rubbing gently but firmly with a very soft silk handkerchief, or, if this is not sufficiently effective, by re-soaking in water, rubbing lightly with the finger and re-drying. One of the drawbacks of this method is that, although your spotting may be perfect for projection, the slide will yet show a transparent

spot when looked at in the hand; and if it is intended for exhibition, you want it to look perfect both in the show case and on the screen. In that case you must resort to a combination of the spotting methods. The transparent colors sold for tinting slides can be used in conjunction with the pencil. The trouble in using pigment is, that the gelatine of the film absorbs the moisture so quickly that it is difficult to get the pigment to spread evenly. Whiskey with a little water acts as a better medium for the pigment. Soaking the slide in water beforehand might obviate the difficulty in getting the pigment to adhere evenly, but then the wet film would pick up dust and hairs, and it would be doubtful which evil would be the greater. J. DUDLEY JOHNSTON, in "British Journal of Photography."

## NOTES & COMMENTS



Filmo Lens Modifier

How to make thin people fat and fat people thin, how to make your friends laugh at themselves and your enemies grit their teeth, these are marvelous achievements but not difficult with the new Filmo Distorting Lens. It is made by the Taylor-Hobson-Cooke Company which bespeaks quality and has the imprint of the Bell and Howell Company which guarantees it. The device is supplementary to the regular equipment of the Filmo Cameras and the varied results are obtainable by merely turning the milled ring. Further information may be had from your dealer or

by addressing the Bell and Howell Company, Chicago, Illinois.

### The Clergy Shur Fire Flash Gun

A good flash gun is a most desirable acquisition for amateur and professional. And a good flash gun is one that goes off at the right time without backfire and does not burn up or fuse in delicate parts when used. These desideratums the Clergy Machine Company, of Des Moines, Iowa, seem to have been able to incorporate in an all steel, virtually enclosed bit of apparatus that sells at a fair price. Your dealer can show you one or write to the makers for printed matter.

### The Kern Bijou Camera

The neatest, sweetest little camera that ever came to hand and built with a sturdiness that makes it seem indestructible. It has features not only novel in themselves but not to be found on any other instrument. The view finder, for instance is of a new, bifocal sort wherewith your left eye centers the camera and the right eye sees, directly and clearly as only unreflected vision can, what you are taking. The shutter is accurate and the lens the fa-

## CAMERA CRAFT

mous Kern f:4.5 anastigmat. Write for a booklet and price list or see one of the Bijous. Hold it in your hands and try it. You will not be willing to leave it unbought. It is sold through dealers or by the Kern Company, 136 Liberty street, New York.

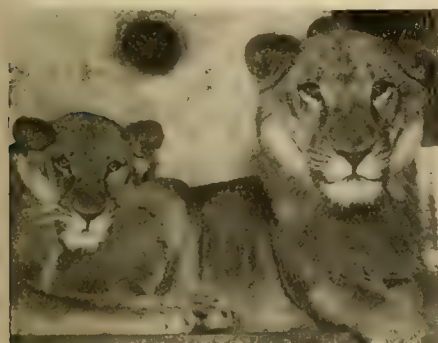
### Victor Flashlight Powder Contest

The \$500 contest conducted by James H. Smith and Sons Company, makers of Victor Photographic Specialties, closed in December and the prizes and some of the winning prints can now be announced and shown.



**CLASS I—PORTRAITS**  
First Prize

H. C. Warlick, 117 Cotton Avenue, Macon, Ga.  
Made with 8 grains Victor Flash Powder, Portrait Grade, in a Victor Studio Flash Cabinet. Voigtlander Heliar Lens, Stop F.8.



**CLASS V—UNUSUAL**  
First Prize

Merwin Eberle, The Oklahoma News,  
Oklahoma City, Okla.  
"QUICKER THAN A CAT"

Made with 36 grains Victor Flash Powder, Normal Grade, in a Caywood Regular Flashlamp. F4.5 Lens, Stop F.16.

Quicker than a cat, the Victor Flash Powder proved in this picture. When the flash exploded, both lions sprang from their resting place and roared, but the camera and powder had already done their work.

Picture was made through the bars of the lions' den in the Oklahoma City, Okla. zoo November 24, 1927. The cage was dark, there being direct light from only one small opening.

The lions were in a small cubbyhole 10x12 feet in size inside the dimly-lighted zoo building. They are young and fierce, and it took considerable patience to get them calmed down for the picture.



**CLASS II—INTERIORS**  
First Prize

Reed & Buker, Photographers with Northern Engraving Co., 413 Schroyer Ave., S. W. Canton, Ohio.

### ELECTRIC FURNACE IN TIMKEN ROLLER BEARING COMPANY PLANT

Made with 1 3/4 ozs. Victor Flash Powder, Normal Grade, in open electric flash pan. Voigtlander Col. Lens 14 1/2 inch F7.7. Stop F.32.

### A Camera Exposition

Bass Camera Company, 179 West Madison street, Chicago, announce a Camera Exposition starting May 1st at their popular establishment.

Everything good in photography, both motion and still, will be exhibited, including interesting exhibitions on the making of celluloid film and graphic exposition showing the evolution of the camera from 1885 up to the present time.

All photographic bugs are welcome.

### Hitchcock and Tinkler Appreciate Photography

One of the great engineering firms of this country is Hitchcock and Tinkler, Incorporated, of Denver, Colorado. Their importance may be gathered from the fact that the Moffat Tunnel was completed by them. This modern miracle of railroad enterprise and public benefaction through commercial channels has been put into history by the above firm in a booklet illustrated with reproductions of photographs. The firm is proud of its work,



well done and is willing to let the world see it, if not in substance then in pictures.

Moreover, the noteworthy thing has been projected into posterity by the publication of a two volume history issued by the Wahlgreen Publishing Company of Denver. These books, too, have utilized photography to the utmost in the realization that Pictures Tell the Story.

The opportunity is too good to miss and we take a special pleasure in offering our highest praise and sincerest felicitations to that master railroad magnate who has taken our beloved Denver and Rio Grande Railway out of a state of duesitude and transformed it into an almost perfect part of an almost perfect system.

## AnSCO Crystal Stipple

The enterprise of AnSCO has put many dollars in the pockets of progressive photographers. Nippon Crepe electrified the profession and gave a stimulus to business by offering the public something new and attractive. Now comes another particularly desirable novelty, Crystal Stipple, a sparkling emulsion that gives real blacks and a sheen surface that cannot be expressed on an eggshell stock. The stipple is not as pronounced as on what the French call Torchon Papier and it is more decided and regular than on eggshell. In short you must see it to know what we mean and seeing it you'll be sold on the moment.

## L. D. Field in the West

It shall be our lasting regret that we are not in when L. D. Field called. We should have enjoyed congratulating him on his accession to one of the high places in the Defnedr Company, and through him to congratulate the company on having so able an executive in place.

## Portable Arc at Sensible Price

Realizing the need of a portable arc lamp by camera owners, both professional and amateur, selling at a reasonable figure, Twinark has been placed on the market. Its many exclusive features, its compactness, its enormous power, have met with instant approval. As its name implies it is a twin arc, scientifically designed, rugged, built to serve and to last. It is being used by many motion picture studios in preference to the larger lamps

on location. It forever banishes the flash-light nuisance from the still photographer. A circular describing this appliance will be sent upon request. Twinark, 434 Larkin street, San Francisco, Calif.

## A Novel Exhibit

One of the interesting midwinter displays at the Du Pont Products Exhibit at Atlantic City, and one which is attracting a great deal of attention, is the showing this week of a series of carbon prints from the Bachrach Studios. The revival of this phase of the photographic art was explained to the visitors to the store by the staff. The prints are mounted on the finest of ivory pyralin. The display occupies one of the large Boardwalk windows. This has been rendered more attractive by velvet draperies in dark brown and silver, which greatly enhance the beauty of the prints.

## The Lios Actinometer

B. Hopfen and Company of 235 Fourth avenue, New York, announce that they are prepared to supply through dealers or, where not stocked, direct, the famous Dr. Schlichter Lios Actinometer. This is claimed as being the simplest accurate device of its sort. The Bell and Howell Company were so thoroughly convinced of this that they have taken over the exclusive agency for the Lios as designed particularly for amateur motion picture work. The instrument is supplied in either the H. and D. or Scheiner scales of speed marking.

## Holliston Photo Cloth

This product has in a way revolutionized commercial photography. It is quite common to receive orders with the requisition that they must be cloth backed. Holliston products are the best of their sort. The particular brand known as photo cloth is very like fine linen in texture and strength and, what is more important, it sticks on first impulse and stays stuck. It does not curl or fray and absolutely does not affect the prints. It may be had in white, gray and blue. No commercial photographers can afford to be without it and amateurs are beginning to find uses for it in hinging album leaves, backing the print with a safe edge at one end and scoring to bend as desired.

## CAMERA CRAFT

### Heliolette Background Films

There was a time when the portrait studio was a storehouse of contraptions, properties, and theatrical scenery. The investment was large and the wear and tear expensive. Those fearful backgrounds! The show cases were filled with old men, old women, young men, young women, athletes, brides, debutantes and dancers, all standing, sitting, posing in the same palaces, gardens, libraries, or what have you.

That is all past and gone, or should be. Heliolette backgrounds are films that offer a hundred varieties and may be fitted appropriately to the portrait. The picture is made with a black background, and when printing the negative is put in the frame as usual, the Heliolette put on top of that and the paper, again as usual. Printing time is not lengthened and the resultant picture is just as if a painted background had been used in the posing.

### German Society for Stereoscopy

Under the above title in Germany, the first society of this kind has been formed in Berlin, concerning all who have interest for the stereoscopic picture, which has not been by any means fully appreciated and which undoubtedly represents the most effective reproduction of all photographic arts of representing and furthermore, to carry it as a medium of entertainment and education to the widest circles. As members may join persons concerned in stereoscopy or interested in the stereoscopic picture, also firms of all countries manufacturing stereoscopic products. The statutes will be forwarded free of charge from the office of the Deutsche Gesellschaft für Stereoskopie E. V. (German Society for Stereoscopy), Berlin W 62, Kurfürstenstr. 125a, by request.

### Burke and James

For a half century Burke and James have seemed to be the mainstay of the amateur and professional trade for novelties and specialties which could be gotten nowhere else. Added to a complete catalog of staples a hundred of those little things which are so essential may always be found in the Burke and James list. They begin the new year well with all the established lines and some new ones.

### Ralph Young, Inc.

The erstwhile firm of Lothers and Young, through the withdrawal of Mr. H. Lothers, is now known as Ralph Young, Inc., and will be under the direct and intensive direction of our friend of the contagious smile. Reports show a healthy increase of business as the work of the concern becomes nationally known and patronage is coming from eastern centers in encouraging quantities. More luck to you, Ralph.

### Pako Gang Rocker

In praising anything made by Pako we always feel as if we were painting the lily and gilding the rose. We feel inadequate, unnecessary. Everyone knows that if it be Pako made it is right and good. The Gang Rocker does what it is claimed to do. It does the work of a gang and depending on the gang, it may be conceived as doing it quicker and better. What do you know of the Pako line? If you are a Photo Finisher you should know everything about it. Write now and get acquainted with ways and means of producing better work in shorter time at a greater profit. Pako Corporation. Minneapolis, Minn. on an envelope will find them. Even the postal department knows them that well.

### Drem Products

The name Drem, which is a trade abbreviation for Dr. E. Meyer, has become one of the staple hallmarks of excellence in large photographic productions. We are informed that the Bromoil inks, brushes and auxiliaries of the process have sold beyond all expectations but that the Drem Transfer Press seems not to have received that recognition which its outstanding qualities and moderate price deserve. We can say from personal experience that a transfer or etchers press may be more costly, heavier, fancier, or what not, but cannot be more efficient, durable, convenient, or better adapted to the purpose for which it is made. No bromoilist should stop at inking up a print. The full enjoyment lies in transferring it to just that tint, texture and weight of paper as best fits the subject. A transfer print represents the final divorce of high-art photography from the stigma of the mechanical.

## The Camera Hospital

An odd name but expressive and correct. William Peters and his staff of expert mechanics have doctored more sick cameras, lenses, fitments and appurtenances than the laymen thinks are used. We have had several precious possessions of our own remodeled and conditioned and can truthfully say that, though they went in very sick, indeed, they came out as good as new, and sometimes better. Moreover, promptness and a punctilious fulfillment of promises added to fair prices makes any transaction with the Camera Hospital a delight. This service is offered also to out of town customers.

### Zeiss

To the average photographer of whatever class, Zeiss speaks mainly lenses, but more and more the public is beginning to take cognizance that Ica Cameras add to their inherent rights the magic of Zeiss superlative. The Ikon line is a strictly high-grade instrument of precision, fitted to meet every requirement of a roll-film camera and has refinements peculiar to itself. Write for a book to Carl Zeiss, Inc., 485 Fifth avenue, New York, N. Y.

## New Haloid Products

When Haloid gets out something new it is as new as newness itself and beyond all question as beautiful as useful. Haloid Silika is justly termed an aristocrat among papers. As smooth as satin, as fine and delicate as old lace, is not exaggerating its looks and qualities. Industro, on the other hand, is what its name suggests, a utilitarian product, none the less possessed of aesthetic qualities for all that. "Like a photo bathed in sunlight," say the makers. Who writes those apt phrases? They are expressive and—note this—they are true. So, write, ye professional photographers to the makers for a sample print on this product and ye shall rejoice.

### Harrington's New Catalog

For the coming year the largest photographic house in the antipodes has issued a charmingly dressed booklet which has the title "Christmas Suggestions." It was circulated before the holidays, hence the caption, but the contents make a pretty complete list of the firm's stock and is a useful mass of data for the prospective buyer and the person who should buy and doesn't know it.

# International Photographic Association

## INTERNATIONAL PHOTOGRAPHIC ASSOCIATION

- 5582—Otis N. E. Card, P. O. Box 408, Bath, Maine. 5x7 (some 8x10) scenic, historical, news pictures and miscellaneous views. Desires to exchange for scenic, historical and miscellaneous (American or foreign). Class 1.
- 5583—Chan Chiu Chung, Post Office, Canton, China. 2¼x3¼ up to 8½x6½ landscapes and various kinds. Desires to exchange for landscapes, bathing girls, scenery, flowers and animals. Class 1.
- 5584—J. Hewlett Cornwall, North River, Warren County, New York. 3¼x5½ views, pictorial enlargements. Desires to exchange for very best work of views, preferably Western mountain scenery. Class 1.
- 5585—W. Clyde Dunbar, Pinecrest, Arkansasaw, Wis. 3¼x4¼, post card or 5x7. Landscapes, animals, figure studies, nature studies, etc. Desires to exchange for general subjects depending on quality of work offered in exchange. Class 1.
- 5586—Jose Maria Olabarria, Estufa 4-1, Bilbao, Espana. 130x180 millimeters. Marine and country views. Desires to exchange for general subjects. Class 1.
- 5587—Juan Cloquell Storer, Box 315, Arecibo, Porto Rico. 5x7 and 8x10 photos. Landscapes and portraits. Desires to exchange for landscapes and art studies. Class 1.
- 5588—James Treloar, P. O. Box 150, Hamilton, New Zealand. 12x10 figure studies and pictorial sub-

- jects of a general nature. Desires to exchange for any kind of pictorial work. Class 1.
- 5590—C. J. Weber, Youngstown Arc Engraving, Youngstown, Ohio. 8x10 pictorial, illustrative and commercial subjects. Desires to exchange for same. Class 1.
- 5591—Walter E. Woestman, Box 2151 Station A, Pasadena, Calif. 2¼x3¼, 4x5 but principally enlargements. Landscapes, portrait, bathing girls and 35 mm. movies. Desires to exchange for portraits, girls, 35 mm. movies, negative or positive. No second-hand theatre films wanted or given. Class 1.
- 5592—R. E. Westmeyer, 191 A Quadrangle, Iowa City, Iowa. 3¼x4¼ and 2½x4¼ middle West and Western views, University scenes and life. Desires to exchange for world wide views.

### RENEWALS

- 1572—Harry E. Bishop, 3741 Sheffield Ave., Chicago, Ill. 5x7 or smaller general landscapes. Desires to exchange for anything of interest. Class 1.
- 5309—Rae Galusha, Warren County, North Creek, New York. 2½x4¼ to 5x7 landscapes and views of the Adirondack Mountains. Desires to exchange for anything of interest. Class 1.
- 817—Stanley Tess, 201 Main Street, Wyoming, Ill. Class 3.

### CORRECTION

- 5577—H. T. Miles, R. F. D. 2, Kimbolton, Ohio. Erroneously published as H. T. Miles, P. O. Box 2, Kimbolton, Ohio. 5x7, 8¼x5½. Desires to exchange general subjects for same. Class 1.



# CAMERA CRAFT



FISHING

A. C. BENTZ

SAN FRANCISCO

CALIFORNIA



*Gevaert*



# FILM PACK

*For Perfect Pictures*

EXTREME SPEED  
NON-CURLING

ORTHOCHROMATIC  
NON-HALATION

In All Standard Sizes—Inches and Centimeters

## NOVABROM

The Standard Bromide Paper for Pictorial Enlargements

*Descriptive Catalog on Request—Dept. No. 4*

**THE GEVAERT COMPANY OF AMERICA, Inc.**

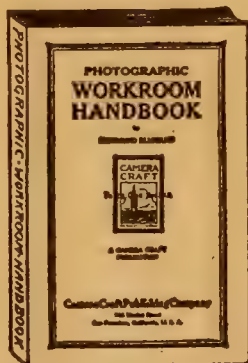
423-439 WEST 55th ST., NEW YORK CITY

CHICAGO, ILL.  
413-421 N. State St.

PORTLAND, ORE.  
345 Salmon St.

TORONTO, CAN.  
131 York St.

*Dealers in Principal Cities of United States*



*The Second Edition*

## Photographic Workroom Handbook

By SIGISMUND BLUMANN

*Editor of Camera Craft*

Will be out and ready for delivery in a short time

The first edition in paper covers is exhausted and in accordance with its fixed policy, Camera Craft shares its profits with its friends by putting the surplus into production without increase of price.

This edition will be fully corrected, enlarged by several formulæ and

**BOUND IN CLOTH AT THE SAME PRICE  
ONE DOLLAR**

*At your dealer or from*

**CAMERA CRAFT PUBLISHING COMPANY**  
CLAUS SPRECKELS BUILDING SAN FRANCISCO, CALIFORNIA





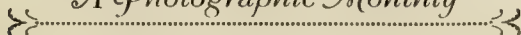


PORTRAIT

*Philip Newberg*

# CAMERA CRAFT

*A Photographic Monthly*



SIGISMUND BLUMANN, EDITOR

*Claus Spreckels Building, San Francisco, California*

FOUNDED MAY 1900

VOL. XXXV

May, 1928

NO. 5

## Phillip Newberg

A Young Artist With a Great Present and a Greater Future

By Sigismund Blumann

*Illustrated by Exemplars of Portraiture and Lighting Diagrams*

*by Mr. Newberg*



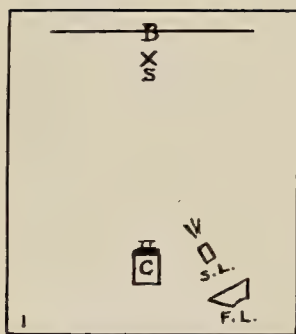
Once at a Photographers' Convention certain prints caught my eye as being not only out of the ordinary but as strikingly a decidedly new note in portraiture with the camera. Analyzing what made them stand out seemed to lead to but one conclusion, they merely expressed the individual who made them and that individuality was noteworthy.

Later I met Philip Newberg. Under the quiet, modest personality shone a flame of ambition, a bright light of talent still to be exploited to its fullness. The man says so little of himself, listens so intently to suggestions, and accepts criticism so graciously that one must be impressed that here is an artist who, without stopping his onward progress is ready and willing to profit by any help that leads toward his goal.

We had little time for conversation but the most adroit attempts to draw him out could find no flaw in his philosophy, no inelastic determinations, no petrified illusions of greatness, no contempt of his fellows. How, by any form of rationalism, could I feel otherwise than that here was one in the profession who would go far and do well.



*By Philip Newberg*



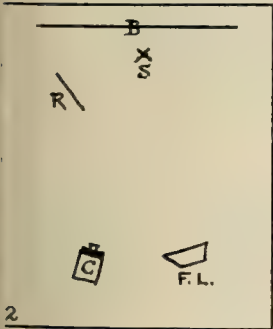
As friend Ruffner, editor of Studio Light, said, "Newberg has no set method of lighting. He believes that each sitter is an individual problem to be handled as the subject demands—that all subjects are good and that his camera is merely the medium through which he must interpret, by the aid of suitable light and shade, the character of the individual." That is well put and true of Newberg and of any and all artists in his line.

But instinctively or through inheritance from his ancestral photographic precedents our friend has hit on the same openness of mind and its interpretation of his sitters that he evinces to life and its experiences. He brings no set of rules to bear in placing light or camera. He feels his way, not as a novice groping, but with the sure prescience of a true artist, and when the picture appears it really is a picture.



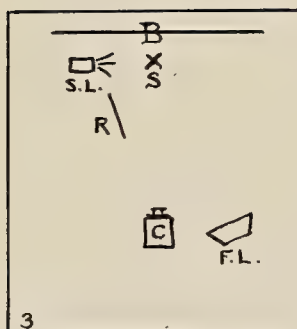


*By Philip Newberg*



He attributes some of his successes to the putting of subjects into proper mood. His own personality helps in that and it would be an incomplete narrative that did not credit a very charming and beautiful wife with her share of the honors. She, it must be, that puts the man behind the camera in the proper frame of mind.

So much for abstractions. The biographical facts shall as usual, be given you at first hand. It takes some coaxing to get these prominent men to tell about themselves. There are some who seem to think a magazine writer should know all about their lives and achievements. Even Boswell may be assumed to have overlooked many items that Johnson himself might have told. However, one can prevail if one persists, and so gentle urging and repeated asking brought the following. Even the characteristic personal paragraph shall be printed, and you will note, dear

*By Philip Newberg*

reader, that I have done none of the steering, made none of the omissions which the gentleman has invited. I please to print it entire and you will be pleased thereat.

"I am afraid that my life has not been a very colorful one, however, with you at the helm to steer it into a story my fears all vanish; so here it is—make omissions wherever you think necessary. it is yours to do with as you please:

Born April 30, 1894, in Galesburg, Illinois. My father, being German, and my mother English, naturally I inherited the stubbornness of the former and



*By Philip Newberg*

enough bull-headedness of the latter to stick to it—which has its advantages, and I might say disadvantages. Having been the first child (I have a younger brother) and my father a photographer, I acquired a certain knowledge of photography at a very early age, my first pictures having been made when I was some few days old and at frequent intervals from then on, my father having infinite

patience for which I am duly thankful.

The early part of my life was uneventful and when I was twelve years of age my parents moved to a college

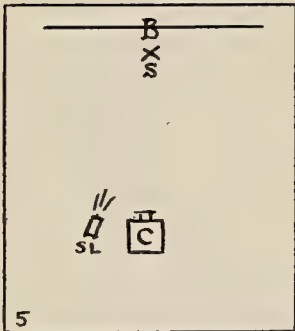
B  
x  
S

C  
S.k.





*By Philip Newberg*



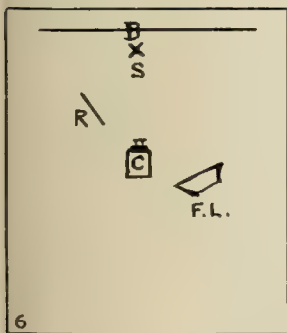
town where my father opened a studio and I continued through the different grades of learning.

While in high school, chemistry had its attractions for me and I took great delight in mixing a concoction which, when dried and sprinkled under the professor's desk exploded like firecrackers with every movement of his feet, which caused him no end of embarrassment—he would

call the janitor to sweep it up and his sweeping only added to its combustible characteristics, much to our merriment. The professor evidently discovered who the guilty party was for, after a few pranks of this nature, I almost lost my place in the chemistry class,



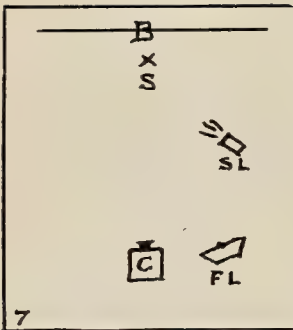
*By Philip Newberg*



besides being assigned some difficult experiments to work out long after the rest had gone home—which the professor stated my brilliant (?) mind would soon solve, but which he had been unable to do, nor had he heard of any one else who could, but he was sure that I could.

After many difficulties I finally graduated from high school and entered the University of Iowa, being elected president of the freshman class of that institution through the vigorous efforts of my friends and the assistance of the fraternity to which I was pledged.

Art fascinated me to such an extent that the rest of my studies might just as well never have existed as far as

*By Philip Newberg*

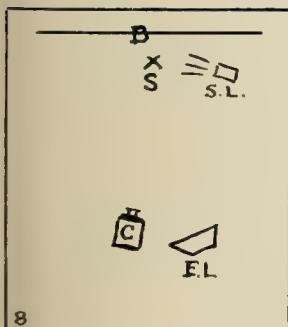
I was concerned, and I ran into many difficulties with the professors in the various classes. They soon gave me up as a bad job and I was granted special permission to enter the art department and study to my heart's content. This study has been invaluable to me. It was my sole ambition to be an artist and a photographer in the full sense of the word, for I thought then, and I think even more

so now, that photography is one of the greatest professions to which a man can fit himself—if it is in his soul and he has the desire. My father had a wonderful lot of patience in instructing me; he wanted me to follow in his footsteps if I chose, as he considered photography a mighty good profession. I can't say that my mother shared his views as there had been too many photographers on both sides of the family; however,





*By Philip Newberg*



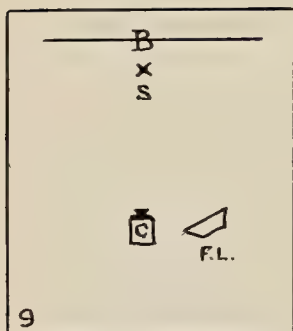
when she saw that nothing else interested me she did all that she could to help me.

I cannot remember the time that the studio did not hold a fascination for me. My father fitted up a room in the attic of his studio, and I look back with many pleasant memories to that spot where I could be quiet, away from the turmoil; if I wanted to paint, I painted—if I wanted to

sketch, I sketched and if I wanted to dream I dreamed—undisturbed. Much of my spare time was spent in the studio; needless to say after I had acquired a certain knowledge of photography a great deal of my time was spent in experimenting, which I have not outgrown.



*By Philip Newberg*



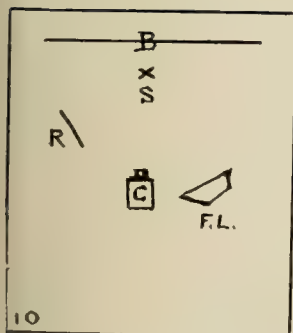
When the United States entered the World War I enlisted in the army and was assigned to the photographic section of the Signal Corps and served as camera man for that department, in the air and on the ground. Eight months after the armistice was signed I received my discharge, and having met, during my adventures in the service, a most charming and beautiful girl, I made

a trip from Washington, D. C., to Los Angeles, California, for the sole purpose of getting married, which I did. I then settled down to photography with great seriousness and it has given me much to be thankful for.

I believe photography to be an art everlasting—much can be said on the subject. It is not mechanical, it is creative. In generations to come—beyond a doubt—huge sums will be spent in purchasing old prints which



*By Philip Newberg*



have attained a remarkable value—why not? What more truthful means of expression?

I admire photographic works as I admire a beautiful painting or etching.

I love nature and its beautiful scenery, being particularly fond of the mountains and the desert, the more weird their moods the more they fascinate me. Our week-end

trips being almost always taken in that direction.

My hobbies consist of out-door sports which I indulge in to the fullest extent when time (and money) will permit, hunting, fishing, archery, motor-boating and golf.



I am very fond of music, enjoy a good show—like good things to eat, enjoy company and admire beautiful women—what more could a mere man ask?

Have my own ideas, don't mind telling them; naturally enjoy wit; take things too seriously sometimes; make changes suddenly and insist on having my hair cut at least once a month. I am fond of adventure; prehistoric relics; cliff dwellers; Oriental atmosphere and hope to make a trip around the world some day."

They are a nomadic race at heart, these artists. Haz voiced the same desire as the core of his hopes—to travel and see the world. Perhaps it is the eternal youth that dwells in the souls of artists that speaks so.

Philip likes beautiful women and having a wife who is the embodiment of beauty his life must indeed be complete.

It is not fashionable to infer lessons and this is not a place for morals to be deduced from biographies, but we must all be impressed by the coincidence that the best photographers are the most intense lovers of photography and retain, through the stress and travail of professionalism, that fresh enthusiasm that is commonly attributed only to the amateur.

## AN APPRECIATION OF THE LOUISVILLE CONVENTION

By Ida M. Reed

Seven national conventions to the credit of Camera Craft—the third for the writer. Three is a magic number and so it proved this year, for the Louisville convention reached the superlative. It clearly showed thoughtful intent back of it and an active influence pushing it right along. Those responsible are to be congratulated and here and now Camera Craft does just that.

There were sixty-five exhibitors with sufficient space for each to make an attractive display, the program was excellent and the picture exhibit a wonder. Anyone of these features would have repaid the photographer for the time and money spent in reaching Louisville—the three heaped his plate full and over.

The Louisville photographers were great: They planned the entertainment with a canny instinct. The Old Fashioned Southern Jubilee was a marvel and accomplished exactly what it was planned to accomplish and that was to "break the ice." Was there ever such a happy informal crowd as we, when Richard Speaight rushed on the stage to root for his namesake?

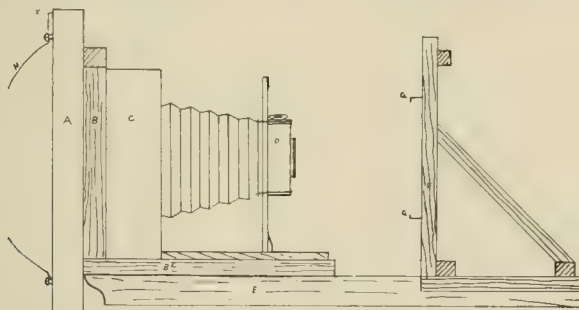
It was all so worth-while that we feel sorry for those who were compelled to stay away. Why not plan this moment to come next year?

Space this month does not permit of giving a real report of the convention and, anyway, we wanted an outsider's viewpoint so have asked Ralph Young to give us his. It will appear in our June issue.

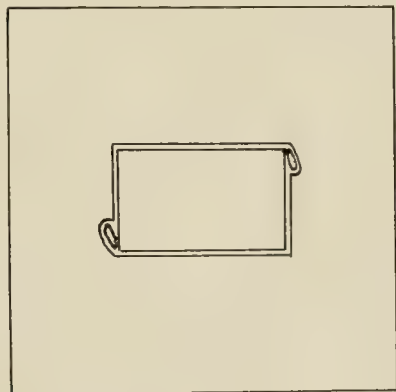
# Enlarging Outfit For V. P. Negatives

*Editor's Note. This article was found among the effects of the original Editor and Owner of Camera Craft, Fayette J. Clute and coming to light at this time when the tendency is to small negatives, is given here as fully up-to-date. There was no name attached and we hope the author may see this and let us credit him in a future issue.* S. B.

There will be no need to indulge in text, mainly abstractions and amplifications of the plain directions, so let us briefly and immediately get to the specifications and diagrams.



A is an iron box 1x10x10 inches with a 6-inch hole cut in the center of one side. And ten  $\frac{3}{4}$ -inch holes cut in the same side for ventilation. Cover the upper five inches with a hood, riveted to the back as in X. Cut a hole in the center of the other side a little smaller than your flashed opal glass. Fasten six small rivets as at Y in No. 2 to hold the glass loosely.

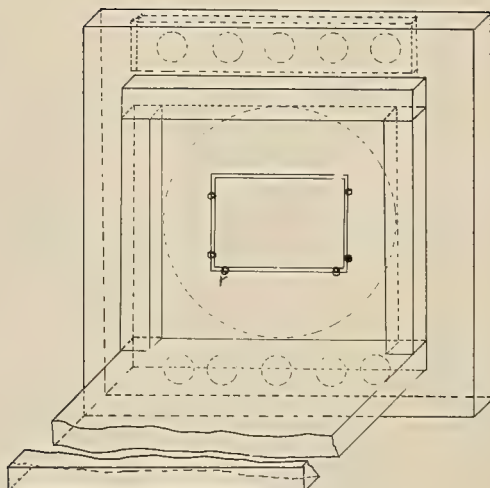


B is a frame just large enough to take the camera, made of  $\frac{3}{4}$ x $\frac{3}{4}$ -inch stuff, except B, which is a board  $\frac{3}{4}$ x8x10 inches; fasten this to A so opal glass comes in center of the frame.

C is a 4x5-inch camera, without a back or a lens.

D is a V. P. special, with the small circular back removed and fastened to the lens board of C with two rubber bands.

E is a table leaf.



F is the easel, made of nine pieces of  $\frac{3}{4} \times \frac{3}{4}$ -inch made so as to fit snug on E, the two uprights being five and one-half inches apart or just enough to hold a  $3\frac{1}{4} \times 5\frac{1}{2}$ -inch printing frame. On the face of these two uprights are holes (to take the bent nails G) to hold different sized printing frames.

H is a Hubbel desk lamp reflector, fitted with a 100 W stereopticon nitro lamp, it is fastened to the back of A with three stove bolts.

I, No. 3, is the kit, to hold the negative made of two pieces of cigar box to fit the back of C (a  $1\frac{1}{4} \times 2\frac{3}{8}$ -inch hole in one,  $1\frac{3}{4} \times 2\frac{3}{4}$ -inch in the other) glued together, two pieces of thin glass  $1\frac{3}{4} \times 2\frac{3}{4}$  inches and two brass clips to hold them.

I insert this kit by sliding C out of B, put in the kit and slip it back into place.

This outfit will print a three-time enlargement on Arturo Carbon Black from an average negative in from two to three minutes.

## NATIONAL CAMERA WEEK



*Pictures  
Live  
Forever*



MAY						
SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		



*Pictures  
Tell  
The Story*



TAKE PICTURES AND CREATE PLEASURE



# Astronomical Photography

By J. F. Chappell

Lick Observatory, Mount Hamilton

(Illustrated by the Author)



The author, J. F. Chappell is a modest and an able man. The two qualities are apt to run together. The article following will prove him a writer of no mean ability. He has succeeded in making a scientific subject clear, understandable and interesting to the layman.

Astronomical Photography is becoming a profitable branch of the craft and certainly not an overcrowded one. The demands made of novitiates are many. Mediocrity finds no place in science. We, therefore, feel it has been quite an achievement to get this text from this man, than whom none could more ably and few as well, cover it.

Mr. Chappell and his wife live on the mountain and see the world as only those who dwell on the heights can. His working hours are spent in dealing with light years of time and infinities of space. His mind is filled with dimensions of almost inconceivable magnitudes.

It may intrigue the reader that here is a man who has the power, the privilege, of recording on a tiny photographic plate points of light that left their source when Nero was enjoying his fireworks and are just arriving at this place now.

Some of the pictures of the Suns you see reproduced herewith may have gone out at the time of the first Easter, but the light starting then is still coming and only future generations can know there is a star or two less in the firmament.

The stupendous work of the astronomer. The fact that a light year is more time than you or I could conceive offhand, and that astronomy deals with distances millions of light years away gives photography a new dignity in its relation to astral science: A sort of visual calculus, reducing infinity to a defined image, a dot or a negative conveying billions of miles.—S. B.

# Astronomical Photography

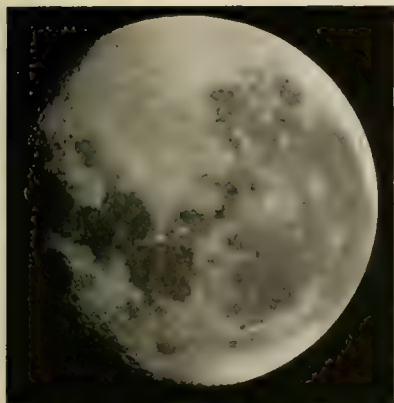


OBJECTS near enough and having light enough are friendly to photograph. It is convenient also to see the subject and focus it on the ground glass. But there is little such convenience in astronomical photography. So peculiar are the demands of sky work that the getting of a usual astronomical plate sounds like a fanciful myth. Astronomy is the fairy tale of photography, legerdemain, the enthralling accomplishment of the impossible.

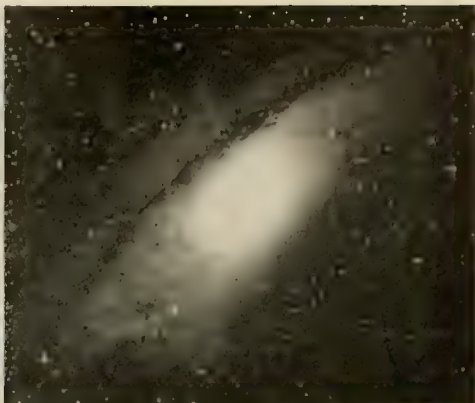
The subject to be photographed may be completely invisible. It is bound to be off in space at a great distance, because the nearest object (except the meteors, which flash at fifty to one hundred miles away) is the moon, 238,857 miles from the camera. Remote stars to be photographed are so many millions of miles away that a superterrestrial unit called a *light-year* has been adopted to measure star distances. This unit is the distance light can go in a year, speeding as it does at 186,285 miles a second (Michelson's 1926 measure), or over eleven million miles each minute. This appears in figures as 5,874,683,560,000 miles. Proxima (of the Alpha Centauri system) is the nearest star, 4.3 light years from us, that is, more than four times six million million miles. The great nebula in Andromeda is now believed to be a million light-years away.

Now these two conditions, invisibility, and almost inconceivable remoteness would seem to preclude all photography. Yet what impressive pictures are made! The prints are not at all like those bare horizons the hunter of African big game brings home, proudly pointing to a speck which he explains was a charging elephant. The astronomical pictures are brilliant and impressive. This is partly due to the fact that they are photographs of light itself: that is, light from its source rather than a dark object revealed by reflected light, or, in the case of the moon and planets, an object reflecting much light and being isolated in the surrounding empty area of darkness.

Even if the source of light is immeasurably distant, and even if it be invisible to the eye with the largest instruments, if a plate is exposed at the telescope, the slow gathering of light, of which a patient camera retina is capable, will produce a brilliant picture. The resulting image may be a spiral nebula that is a distant system greater than our own whole universe of earth and sun and stars.



*The Moon*  
at 16 days, 18 hours, 238,857 miles away



*Nebula in Andromeda*  
.1 Million Light Years from the Camera

This fixed gazing of the camera, and hoarding of light on the plate hour after hour is a cumulative power of the chemical retina which gives results in advance of any possible visual work. And so it happens that the photograph has invaded astronomy, and ever since the invention of the dry plate has slowly been expanding within astronomy to a super-importance now being more and more realized.

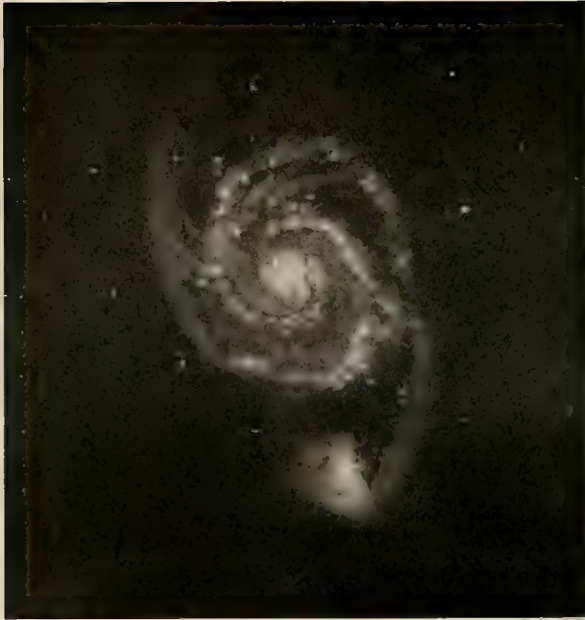
The general public usually has conceived of an astronomer as scanning the heavens, eye to telescope. The great extent of his daytime desk work is not generally understood, and the great extent to which a photographic plate replaces his eye at the telescope is little known.

Historians are now claiming that the beginning of the use of photography for astronomy marked more of an epoch than even the invention of the telescope. However that may be, work on the stars today is an admixture of visual observation and photography from which computations and deductions are drawn; and this admixture of eye and camera during the last 60 years has steadily become more and more photographic. Ninety per cent of the time, telescopes will be found with a plate holder attached instead of an eyepiece. Dependence is more and more on the film and plate records, the laborious drawings of the past having less accuracy and scope. The new plates of 1871, when gelatine was substituted for collodion, were first used astronomically by Sir William Huggins in 1876.

The photographic methods were adopted, and soon proved to be incomparably faster. Holden said, that every important result reached by his four years study of the Orion nebula, plus many other results, were achieved by Dr. Common's later taken photograph—an exposure of only 40 minutes.

Every branch of astronomical work is now aided by photography. Sun study usually means sun photography. The camera is the best





CANUM VENATICORUM—THE SPIRAL NEBULA M 51  
*A system probably greater than our entire universe of Earth, Sun and Stars*

method for investigating the sun's surface, for in an instant with a slow plate and rapid exposure a better picture is obtained than a trained draftsman can produce in hours. Many observatories are devoted almost exclusively to sun photography, as Meudon in France. Mount Wilson excels in this work and has much equipment for photographing the sun. By means of the spectroheliograph the sun is photographed in the light of a single spectral line, showing the distribution of the hot gases such as hydrogen or iron over the surface of the sun.

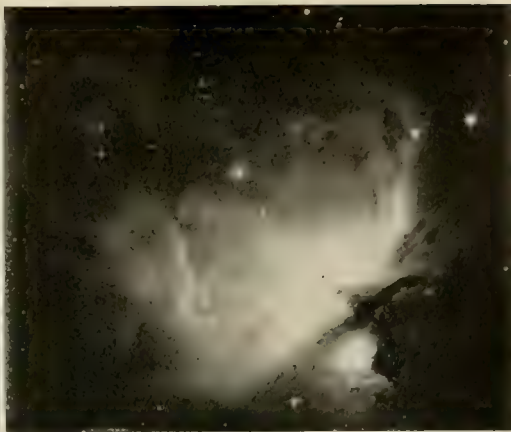
The moon, the only other body in the heavens that shows as much more than a speck of light to the eye, was first successfully photographed in 1850. Then Bond used the old daguerreotype process. This first attempt led to better and better moon pictures up to the latest atlases published at Paris, Lick, and Harvard, showing fine detail of surface. From these, Saunder and Franz have computed locations of more than 3,000 points accurate within 1,000 feet, and altitudes for 34 points varying from 16,000 feet below the mean surface of the moon to 9,000 feet above it.

The moon and sun are readily brought into the field of view, but a certain star is not so easy to locate. This is facilitated however by the fine records left by workers through the years, and published positions of most objects in the sky are available. The telescope is equipped with two graduated circles: a correct reading on these will swing the lens into place, bringing the desired star into the field of the finder. Hand guid-



5. NEBULA H. V. 24

*Comae Berenices seen on edge*



6. NEBULA IN ORION

*A few minutes exposure is of more value than four years drawing*

ing then centers the star on the intersection of the cross-wires, and the exposure may be begun. If the object be faint the exposure may need to be hours long, or even continued for several nights. Since the camera is directed to an object off the earth, and since the earth is rapidly turning on its axis, the star will disappear in a few seconds from the field, swung out of view by the rapid rotation of the photographer's platform, the earth. To correct this the telescope is clock driven with the exact speed of the earth's rotation, and it automatically swings counter to the earth's movement while pointing at the star. Nevertheless much hand guiding of the telescope is necessary to exactly center the object so it will not trail or blur. This guiding becomes most intricate and fatiguing when the astronomer attempts to get a picture of the light from one of two close double stars—so close that the naked eye cannot separate them: an example is the difficult work of Dr. J. H. Moore, Astronomer at the Lick Observatory, in procuring plates of the faint companion of *Sirius*. This has been a much disputed star this year since such astonishing facts have been discovered: that its size is only three times that of the earth, but that it has a mass equal to our sun. One cubic inch of it is said to weigh a ton. Plates of it are much desired for analyzation but they are most exacting to procure. The slightest fault in guiding will let rays from the companion star befog the plate and so spoil hours of labor.

After such plates are taken, computations are made to deduct the earth's other motion, revolution about the sun, so the photograph is finally recorded as if taken from a camera on the sun itself. An effort is now being made to verify also an estimate of the sun's motion through space. The latest results by Campbell and Moore based on forty years of extensive observations both at the Lick Observatory and at the southern station of the University of California in Chile, give a



7. A PORTION OF THE MOON



8. CRATERS OF THE MOON

*Craters on the Moon cast deepest shadows at an early phase. The largest are more than a hundred miles across and may rise to an altitude of 20,000 feet. From such photography locations are computed, accurate to within a thousand feet.*

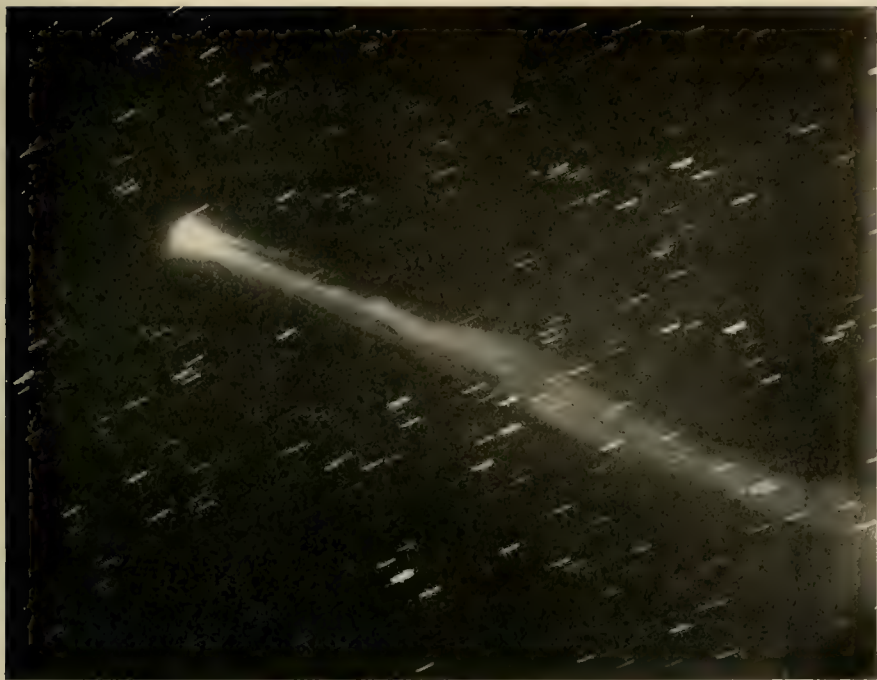
value of 19.7 km per second for the sun's travel (solar apex  $17^{\text{h}} 54^{\text{m}}, +27^{\circ}.2$ ).

Of all the scattered stars that confuse the view, a few objects stand out as nearer to us, wandering in the sky, and different in kind from the stars proper. There are the meteors falling near the earth and igniting to a blaze of fast fading light from the rush of friction through the earth's atmosphere. These are often of known streams in regular orbits, and study of them is most accurate if photographic. Sometimes these are caught by chance on plates exposed for other purposes, but special apparatus is set up at times of the special meteoric showers.

Other distinctive forms are the comets. Russell<sub>7</sub> claims the recent advance in knowledge of comets as due to photography's revelation of details wholly invisible to the eye. Bond got the first known comet photograph in 1858.

Seven other objects, starlike dots in the sky, show through the telescope to be not stars at all, but disks, dark bodies like our earth, five of them having their own circling moons, and changing apparent position in the sky, as they, like the earth, revolve about the sun. These planets are comparatively near to us and give a variance and human interest that makes studying and photographing them especially worth while. The absorbing problem of proving life, or possible conditions for support of life on these other planets, has led to many exposed plates and long night watches. Their positions have been closely computed. Even the ephemerides of their moons are printed in advance yearly. According as





COMET RORDAME

*Note the elongated images caused by the drift of the stars in relation to the camera which is focused on the moving comets. The direction of these images indicates the direction in which the comet was traveling, also the position of the Sun is shown, for the tail of a comet streams away from the Sun even if the comet is turned and travels into its tail*

they approach us or recede, and according as one face or another revolving before us is to be studied, the time to set the camera must be well considered. A particularly favorable time may not come for a long interval. They give a fair size image: *Mars* at opposition shows on the plate not quite  $1/10$ th of an inch with the Yerkes instrument. The Lowell telescope gives it less than half this size. The Lick reflector records its size at about  $3/16$ ths of an inch. The commonly published prints are very much enlarged.

Two of Jupiter's nine moons were discovered by Perrine in December and January, 1904 and 1905, on photographs made with the Crossley Reflector at the Lick Observatory, also the 9th moon by Nicholson 10 years later. The 8th was also photographically discovered at Greenwich by Melotte in 1908. *Photographically discovered* has become a stock phrase and it is asserted by many astronomers that discoveries of the future will be predominantly photographic.

---

*This is the first of a series of articles on Astronomical Photography by J. F. Chappell. The sequences will appear in subsequent issues.*

# Camera Work of Moving Pictures For the Amateur and Professional

By Ernest M. Reynolds

Illustrated by the Author

(Continued from our April Issue)

## ELEMENTARY CAMERA PRINCIPLES

There are probably few pieces of mechanism which have had a more far reaching effect than the moving picture camera. It is also quite probable that the camera is least thought of by the multitudes as they view the projection of moving pictures. It is seldom seen except now and then when news-reel men come to town to record a gala day or disaster. In fact the camera is the least conspicuous of all, even in the regular producing companies. On the other hand, cameras and their operators, the cameramen, are given every advantage possible. Scenes must be set in just the right way for the camera to faithfully reproduce a certain effect; powerful lights must be placed just right and lastly, the greatest factor in front of the camera, the players, even they must bow to this instrument.

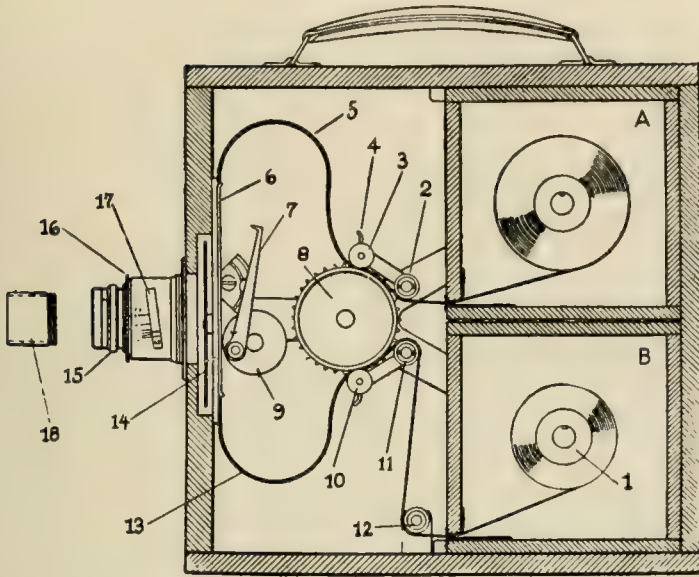
It goes without saying that the best camera in the world placed in the hands of a novice is very liable to produce next to nothing usable. But, if a thoroughly trained cameraman is given a very ancient and decrepit box called a camera, it is astounding the results which he can obtain. However, with the combination of a good photographer and a high class camera we are assured pictures that justify the expenditure of thousands of dollars on a single scene.

When one looks at the wonderful results of modern motion pictures thrown upon the screen, it is natural to lose sight of the fact that weeks and weeks of work were required to prepare the various details of the picture. The scenario, the cast of characters, costumes, sets in the studio and location of exterior scenes, must all be planned and arranged. It is obvious that enormous amounts of money are expended in each of the above details.

Is it any wonder then that the motion picture photographer should know just what move to make next and not have to ask questions? For this reason he who covets the fine art of cinematography should be willing to start at the bottom and be master of each step which finally lands him upon the shooting platform.

A fair knowledge of still photography should be obtained by practical experience. By the word "still" is meant the ordinary camera such as a Kodak or view camera. In other words all cameras except the "motion" variety are still cameras. As a matter of fact, the motion picture photographer is just as liable to be called upon to make a still

## CAMERA CRAFT



picture as to make a motion picture scene. Most of the professional cinematographers of today own their own equipment, including both still and motion picture cameras.

The motion picture camera is operated upon the same principle as the average hand camera, and has the same three fundamental features, namely, the lens, the shutter and sensitized surface which records the image. The length of time allowed for the light to pass through the lens onto the film is called the exposure. The average "snap shot" exposure is about one twenty-fifth of a second. Under normal conditions the exposure given a motion picture negative is nearly twice as fast or about one fiftieth of a second. The latter exposure is made with a very fast lens which compensates for the shortening of the exposure.

Nearly any fast lens is adaptable to the moving picture camera. A fast lens may be distinguished from one of the slower variety by the markings which are nearly always found on the front edge of the lens barrel. For instance, the distinction of  $f:3.5$  denotes a very fast lens and is adaptable to motion picture work.

Every lens has a definite focus by which it is designated. For instance, the usual cinematograph lens is termed a two-inch focus or a two-inch lens. These lenses are made up of two or three small discs of glass assembled in a parallel formation, all of which are placed in a barrel or tube. The iris or light valve is placed in this tube. The distance from the center of this tube to the film is called the focal length of the lens.

When contemplating the purchase of a motion picture camera for amateur or semi-professional use, the first thing to be considered, of course, is the price. This price may vary, according to the type of camera and if it is new or second hand. The second hand camera may



well be considered if it is offered for sale by a reputable concern. In case it is for sale by a private party, a thorough test should be allowed before purchase. For those who feel they can afford it, the new camera is undoubtedly the best. It is very hard to know just where to draw the line between the various makes of cameras and say that any one or two will do better than some others. However, the prospective buyer should have a fair idea of what goes to make up the practical moving picture camera.

The mechanism of the cinema camera is a combination of two mechanical motions, continuous and intermittent. The continuous motion consists of a sprocket wheel which engages in the perforations of the film and draws it from the magazine. The intermittent mechanism takes the film step by step behind a window or aperture which forms the individual pictures. The film then passes over another sprocket of continuous motion and is led into the receiving magazine. The regulation camera of today is geared to make eight exposures to every turn of the crank; in other words, two turns of the crank for every foot of film. Every camera should have a film dial which registers the number of feet of film being turned through the machine. The film is held in retorts or magazines, their capacity being either two or four hundred feet of raw stock. It is obvious that these boxes must be positively light tight as well as the entire camera box. When the film has been threaded into the camera and ready to use there is a certain amount of wasted film, caused by having to handle it in daylight to thread. This waste is small and unavoidable in the present day methods of threading.

The accompanying drawing is that of an amateur camera. However, it serves admirably to illustrate the prime elements which are embodied in the instrument. A and B are the film magazines. The upper one contains the roll of unexposed film, while the lower magazine holds the exposed portion. The path the film takes in emerging from magazine after passing through velvet slot, is under the stationary roller 2, and then engaging with teeth of sprocket 8, passes under spring roller 3. This holding device may be lifted by the clip 4. The film is then placed so as to form the upper loop 5, and threaded down through gate 6, then forming lower loop 13, and back up again to sprocket. This time the film passes under sprocket and is held by spring clip 10; over roller 11, down to roller 12. Here film takes right angle turn and enters lower magazine through velvet slot. Shaft 1 is turned by spring belt, coming from pulley fixed to shaft upon which the sprocket is placed. This shaft is turned by crank on outside of camera. The claw 7 is shown in a back position or disengaged from film. By the rotating of cam 9 the claws are made to engage at top of picture frame and then pull straight down for three-quarters of an inch, disengaging at the end of stroke.

The shutter 14 is geared to intermitting mechanism in such a manner as to be closed over the blade over picture, while claws are drawing film down through the gate. The focusing of lens is accomplished by

turning milled ring 16. The lens itself is brought nearer or further from film by action of spiral slot 17. The iris diaphragm is opened or closed by turning ring 15. A sunshade 18 is sometimes used and screws into front part of lens. It is quite necessary that the gate of camera be made in some way so that it is possible to look upon the film for focusing. This focusing is generally done directly upon the film as it lies threaded in the gate. Under ordinary light conditions one can see the image fairly plain, at least plain enough to tell whether it is sharply focused or not. Some cameras are equipped with a prism or mirror which reflects the image at right angles to the aperture, which makes it much easier to see. If the light is very poor the image will hardly be discernible through the negative film. This can be overcome by using a piece of ground film. This is a sheet of film such as generally used in still photography, with one surface diffused or ground. A piece of this is cut just wide enough to fit in the gate of camera, instead of the negative film. In this way the image may be seen in nearly any kind of light. After carefully focusing the lens, remove ground film and thread negative back into gate and intermittent mechanism. However, a carefully calibrated lens mount with the various distances marked upon it, will suffice in many cases. In operating the professional cameras the lenses are usually turned so as to place them in front of a small ground glass aperture; this of course being the most accurate way of focusing.

The exposure of the film is largely controlled by the iris diaphragm in the lens. It is difficult to set down given rules for exposure as practice will prove which opening is best for different light conditions. A good rule to follow, as given by an old-timer, is expose for the shadows and let the highlights take care of themselves. In other words, give enough exposure to the film to photograph into the shadows and to a great extent disregard the highlights; let them take care of themselves. For average sunlight out of doors in summer, the iris can be closed to  $f:8$  or  $f:11$  and satisfactory results obtained. Whenever an interior scene is attempted it is safe to use the lens wide open. If there is little or no fast action in the scene, a little slower turning will do no appreciable harm and on the other hand will help to increase the exposure a great deal. Care should be exercised in slowing the cranking speed as in fast or sometimes even in normal action it is very disastrous. The result, usually, is that the people or moving objects are jumping around most unnaturally.

Nearly all makes of cameras are now fitted with an extra shaft end which, in short, is the shaft which directly does the intermitting of the film. Therefore, one complete turn of said shaft or spindle will advance the film one exposure. The crank handle of the camera should be interchangeable with both regular and "trick" crank, as this is often called.

A very important member of the moving picture camera is the shutter and it will pay the novice to study its various exposures, running at different speeds and openings. The shutter is a revolving disc made

up of two movable blades, one laid over the other. In this manner the blades may be adjusted to any desired opening. They are generally fastened to the shaft by a clamp or thumbscrew. This design is for the simple adjustable shutter. The reason for different openings is principally for stopping very fast action. For example, in an automobile race the cars move very swiftly and an exposure of one thirty-second would only result in a mass of blur on each picture. To obviate this the exposure is shortened by adjusting the movable blade of the shutter to a smaller opening. The average shutter when running under normal conditions is one-quarter to a half open. For instance, if a shutter is one-half open and one-half closed, we call it 180 degrees open. If the camera is making sixteen exposures or pictures per second and only one-half this time is used for actual exposure, each picture then is getting one thirty-second part of a second exposure. From this it will be easily seen that if the shutter opening is decreased, the exposure on the film will be decreased accordingly. To compensate for this decrease in exposure a larger diaphragm opening must be used.

(TO BE CONTINUED)

## A Darkroom Outfit in an Overcoat Pocket

By Sigismund Blumann

Many years ago a party climbed one of the high mountains of the Sierras and, as one of the party, owning a camera and pretending to know something of photography, I was appointed the official view-taker of the expedition.

The outfit consisted of a five by seven plate camera, a heavy tripod, and the various things that go with such an equipment. It weighed about ten pounds, including the loaded plate-holders as packed, and by the time the mountain top was reached it weighed a hundred.

Exposures were made with care and discrimination: plenty of discrimination for the supply of plates was limited; and two weeks later they were developed with equal care at home and hundreds of miles from the scenes. Fifty per cent rotten, twenty-five per cent fair, and twenty per cent good, with five per cent real pictures.

The proper thing to have done should have been to travel to that mountain and climb it with a new supply of plates and retake ninety-five per cent. The proper thing was the impossible and I left the making of those pictures to others.

A year or so ago it was my privilege to visit Mount Rainier as one of a convention party of professional photographers. Many of us carried cameras. Mine was a Graflex with a Graf Variable, an Ansco 2¼ by 3¼ roll film with a Tessar 1C, and as many film packs and roll film spools as I could stuff into the crannies of my valise.



Of the hundreds of pictures taken, mine seemed to have pleased the professionals best. Amateur luck! Better taste! Superior ability! Perish the thought. No luck, no taste, no ability. Here is the secret, divulged here and now for the first time.

In my right hand overcoat pocket was a carton of Rytol Developer Tabloids, ditto Bromide, ditto Hypo. In my room was an ordinary pocket flashlamp with a circle of ruby celluloid screwed behind the lens.

As soon as I had a batch of negatives to develop I withdrew to my room in the hotel, thawed out some of the water, developed, fixed, and considered the results. The ninety per cent of retakes were retaken and with repeated trials and error, I left Rainier National Park with a set of really, I say really and don't mean pictorially excused or justified, fine negatives.

How many rolls and film packs were surreptitiously buried under the snows of old Rainier is nobody's business. No one cares how many hours Paderewski practiced before he could play as we pay him fabulous amounts to play for us. No one cares how many canvases Corot spoiled to produce one masterpiece. No one should care how many attempts I made to score one success. The prints are the things.

So, I advise my outdoor friends who travel far and strive hard to reach those alluring and almost inaccessible spots to put a dark-room outfit in their pockets and develop their negatives on the spot. If this be advertising, let my gratitude to the firm who make Tabloid Photographic Chemicals serve them so. They will not offer me half the number of thanks or sincerity that will come from the readers who try the plan and come home with success assured by success achieved.

#### THE MEADOW

By Bert Leach

*The clovers nod their purple heads  
To gallant bees who live on kisses;  
The gay lark laughing sings that this is  
The day the bee the clover weds.*

*The air is full of butterflies  
As if the bow of colors seven  
Had burst and fallen in bits from heaven  
To make the meadow paradise.*

*The slender shadows leap and sway  
And mock the gallant bowing grasses,  
And jeer at each sweet breeze that passes,  
Some rose's courier, on his way.*

## CAMERA CRAFT



*Ice Team*

*E. A. Nievera*

FIRST AWARD: *May Competition, Advanced Class*

### **If You Want Prints Returned**

Several of our best contributors have lost prints they wished returned through failing to enclose stamps with the pictures, or in any way notifying us that they desired such return until weeks after the judging. Please be informed that after each judging all prints not marked as to be returned to maker are destroyed. To keep them indefinitely on a possibility of their being reclaimed would require a fair sized store-room and extensive book-keeping. Please send stamps with the prints, not pasted to anything but enclosed in an envelope, the flap of which had best be tacked to one of the prints.

## CAMERA CRAFT



MAY 1928

ADVANCED



SECOND: *M. A. Obremski*  
FOURTH: *Fr. Pfennigbauer*

THIRD: *Tomihisi Furuya*  
FIFTH: *Dr. Max Thorek*

### MAY 1928 COMPETITION

#### Advanced Pictorial

Ernie Aftgut  
Arnold Arnsten  
G. Bertelli  
Miss S. Bonn  
Mrs. Inman Collopy  
Dr. Albert Creitz  
Miss Helen Duane  
Andre Dufour  
P. Eigeman  
T. Furuya

Michael Graney  
Adolph Gutman  
A. F. Heineman  
Rudolph Hiller  
Fred A. Jackson  
Dr. M. Jepson  
Mrs. M. Johnstone  
William Kane  
Miss M. E. Kurtzen  
Otto A. Leischer

J. D. McCauley  
E. A. Nievera  
M. A. Obremski  
Franz Pfennigbauer  
O. Remsen  
Franz Rohl  
Dr. Max Thorek  
H. G. Trenken  
H. Tyzack  
Henry Ullman





*Extry!*

*E. B. Meyer*

*FIRST AWARD: May Competition, Amateur Class*

# CAMERA CRAFT



Second One

*Not signed*

1922



SECOND: *Not signed*  
FOURTH: *T. K. Tsukane*



THIRD: *T. Noguchi*  
FIFTH: *Marjorie Bentley*

## MAY 1928 COMPETITION

### Amateur Pictorial

Howard Atwood  
R. A. Barber  
M. Becher  
Miss Marjorie R. Bentley  
Dr. C. E. Bousfield  
E. J. Brown  
Herbert Christoffers  
A. W. Clark  
I. D. Conklin  
Antonio T. Cosin  
Eugene Cutshall  
Heinrich Ditweiler  
Andros DuForge  
Mrs. W. F. Eldridge  
Aura M. Estes  
Andre Fenelon  
Jose M. Gabriel

Edward Glaser  
Louis Adolph Hittler  
Adlake Huston  
T. Idsumoki  
O. Ikuta  
K. Itaki  
J. C. Justo  
Miss Marie E. Kaufmann  
T. Kojima  
W. H. Levisan  
Dr. G. S. Lockett  
Donald Lynn  
A. S. Macfarlane  
Paul W. Macfarlane  
Mrs. E. B. Meyer  
Louis A. Murray  
Otto Neuman

Miss J. Nevers  
T. Noguchi  
Mrs. W. M. Oppenheim  
Dr. F. Ottersen  
A. Petersen  
Rene L. P. Raoul  
Dr. F. F. Sorenberger  
T. K. Tsukane  
Otto Uffer  
W. A. Van Dyke  
H. Veller  
W. A. Watson  
Arthur Warren  
Miss Sarah Watterberg  
L. A. Whitford  
Frank Yelland  
Guigliamo Zambrezzi



### The Camera In May

From time immemorial the month of May has inspired poets, musicians, painters, and the hearts of humanity less gifted in artistic expression. It has not impressed the photographer so evidently. Yet in every country in the temperate zone this month represents the climax of glory that Spring has been promising through the blustering March and showery April days.

The green leaf buds have opened into smiling leaves, the flowers seem to laugh gaily to us, birds sing in the trees and the lark waits for our near approach to float upward on the volume and afflatus of its own song. The fields lie velvet-carpeted for our tread the hills call to us. In the mountains a thousand grandeurs are ready to be made into pictures.

If yours has been the sin of permitting a camera to lie idle on the shelf, take it down. Take it down and load it. Go abroad into the open and under the blue sky give thanks to Providence for a beneficence that only your appreciation can express sufficiently.

Should your pleasure lie in motion pictures, bethink you of the falling waters that dart over precipices, seem to float downward and end in white froth in the pools. The waving branches, the slowly moving clouds, the lone figure walking across the landscape, pictures everywhere.

There are times when a benevolent mood is on me and I wish the power were given me to awaken the millions of kindred souls who are looking for a hobby, to a realization of what joy photography can give. With the tired, blase persons who have lost the ability to enjoy the camera I have little patience. No one who has the spirit of art within him can ever have felt the elation of having caught beauty on the wing, so to speak, and be content to leave repetitions of the emotion for others thereafter.

Once a real Camera Nut, always a Camera Nut. Resign yourself to that. So out with the camera. We cannot all go afield together in the body but we can in the spirit and, what is more, we can approximate a real sharing of the joys of May by showing one another our pictures. Think of that as one of the ties that bind. Let me see some of them and if you promise not to blame me for making pictures as badly as poetry perhaps I'll let you see some of mine.

### The National Convention Review

Mr. Ralph Young of the Ralph Young Studios was to have written a review of the Photographers' Association of America's convention in Louisville, Kentucky, which should have appeared in this issue. Coming home more or less fatigued with the immediate need of taking up his own affairs, it was hoping too much to get that text from him. As one of the speakers and demonstrators, Mr. Young was in the middle of everything and his impressions are valuable. They shall positively appear in the June issue. In the meantime our own Miss Ida M. Reed has told succinctly of her experience and this appears in the body of the present number.

Conventions are of general interest since any event that gets together the members of a craft must lead to the betterment of the craft. That means to the public at large better things for them, too.





### Growing Whiskers Visibly

Make up your performer with a long beard, securely glued to the face. Lie him at ease in a good light and run three or four feet. Trim off an inch or two of the beard and run another few feet. Continue the trimming and the exposing till only the stubble remains, then take it all off. That is your trick reel.

This is important—in each cut and continue turn back a few frames so that the lessening beard blends its various lengths. And by all means see that the actor does not move as much as a hair's breadth. You may now run this reel by reverse showing Rip Van Winkle asleep with his whiskers growing as the years rolled past.

### Coming Possibilities of the Film Loop

There are no doubt many scenes among your personally made films which lend themselves to the amusing effects accomplished by this simple trick. Suppose, for instance, that you have in your summer vacation films a four to seven foot scene showing someone dipping a cup of water from a spring or mountain brook, raising it to the mouth and enjoying the cooling drink. To form the loop for projection, carefully cut the scene from your film at such points that the positions in the first and last frames of the strip are the same. For example, the scene might start with your friend standing upright, cup in hand. Cut it here and then follow through the scene to the point where, after drinking, the cup is lowered to the same point at which it was held in the opening frame, and cut again. Now splice these two ends together, thread the loop in the projector, and wait for the laughs that are bound to follow.

The effect is evident; your actor or actress fills and drinks the cup of water again and again. Those in your audience will not be surprised at the first few repetitions. Then they will realize that a trick

is being played upon them, and the entertainment value of home movies will have scored another victory.

Wonderful sleight-of-hand tricks can be shown on your screen through this same artifice. A magician may be made to extract rabbit after rabbit from a hat without interruption. Any action which can be pictured in a few feet of film, and which can start and stop with the actor in the same pose, can be shown repeated over and over by means of the film loop with assurance that the effect will be amusing.

—Filmo Topics.

### About Lighting Conditions in May

May is the first of the spring months that assures us plenty of brilliant light for cinematography. And better light means better pictures, for you can "stop down" the diaphragm openings and obtain much greater depth of focus than is possible under poor lighting conditions. At the same time, the new foliage, just bursting into its full glory, offers opportunities for striking shadow effects and beautiful backgrounds.

Because of the somewhat marked change in the condition of the light that comes with the springtime, the following suggestions may aid you in selecting the diaphragm opening that will assure you the best of picture-results:

When the brightness of the spring sun is made even brighter by natural reflectors, such as the lake, the ocean, or the white sand on the beach, f:16 is the proper diaphragm opening. For ordinary outdoor scenes in the open park or garden, f:11 should be used when photographing in the bright sun; but if the sun is partially obscured by light clouds, f:8 will give clear pictures without danger of under-exposure. If the garden or park is somewhat shaded, f:8 should be used while the sun is shining brightly, and f:5.6 when clouds obstruct part of the light.

Remember that the close-up requires a larger diaphragm opening than does the "long shot." For pictures with the subject from four to eight feet from the lens, always use the next larger diaphragm opening. And don't run the risk of over-exposing the balance of the reel by failing to re-set the diaphragm to the next smaller opening when you have made a close-up and again want to "shoot" a distant subject.

During the spring and summer months, great care should be exercised in the selection of a suitable background. Too much sky or water in the background is almost sure to give your pictures that thin and "washy" appearance that is indicative of over-exposure. Not more than one-third of the picture should consist of such background, and where it is possible to get the desired results by eliminating such open areas, this should be done. The consequent saving in film that might otherwise have been over-exposed will more than compensate for the slight extra effort and time spent in the choosing of a harmonious setting for your picture. Sky and water scenes are often desirable, of course; but in the main, it is best to avoid them wherever possible.

—Cine Kodak News.

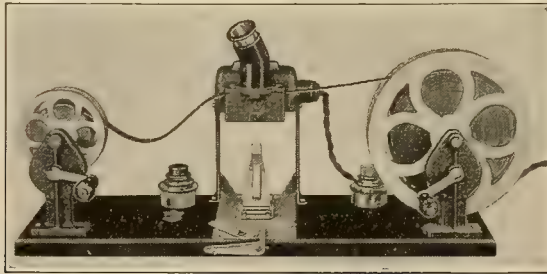
## A New Cinophot

The Cinophot seemed impossible of improvement, yet it has been improved or better brought up to the moment. The instrument now permits direct determination of the right stop if used with a Cine-Kodak or any camera having a taking speed of  $1/32$  at normal frequency of 16 frames a second. A further addition is the speed dial on the third ring. Users of cameras like the aforementioned will find it unnecessary to manipulate the second ring.

The phenomenal progress made by amateur cinematography in the United States during the past year or two demands an equally advanced light meter and for accuracy and efficiency the Drem meters were always noted—they now keep pace with the times and offer particular and peculiar conveniences of operation that will appeal to the expert as well as the novice.

## To the Cine Amateur

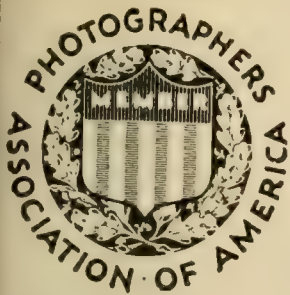
We will publish such discoveries and experiences as the amateur may send us and maintain a friendly interchange through this department if the readers will lend their assistance as they have done to such general advantage in the "Amateur and His Troubles." Even your difficulties may help a fellow enthusiast.



## Bell and Howell Accessories

This representative American concern now issues a catalog that makes the B. & H. a virtually complete line. Eighteen lenses are listed which are fitted to be instantly interchangeable on the Filmo and Exposure Meters, Distance Finders, Focussing Microscopes, Vignettes, Sky Filters, in short everything that the Cine fan could want are in the catalog.

Our interest was especially excited by the Picture Viewer, Rewinder, and Splicer. It supplies a long felt want in a form that leaves nothing to be desired and no improvement possible as far as our limited knowledge goes. This instrument will help wonderfully in the making of continuities and in the rectification of errors while running the reel. It is not just a convenience but a necessity.



## Association News

JOHN R. SNOW, Mankato, Minnesota, *President*  
CHAS. AYLETT, Toronto, Canada, *1st Vice-president*  
D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*  
GEORGE STAFFORD, Chicago, Illinois, *Treasurer*  
C. W. HOWSON, Minneapolis, Minn., *Chairman Commercial Section*  
PAUL TRUE, New York City, *Chairman Manufacturers Bureau*  
L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*

### PHOTOGRAPHS *Live Forever*

#### Commercial Tuition at Winona

The new school of illustrative commercial photography will be conducted at Winona Lake from July 23rd to August 3rd, under direction of Charles Kanarian of New York City, assisted by a capable corps of instructors.

The program includes not only the technical and theoretical branches but a complete business course in the getting, holding and efficient handling of business. Live models and properties, merchandise of all sorts, will be used in practice work and demonstrations.

The prominent artists and men actually engaged in the profession who are to comprise the faculty will be announced later. Already a half dozen registrations have been received and as the number accepted is limited to forty it might be well to take time by the forelock and send in your application and remittance early. The tuition is fifty dollars and such employees as wish to enroll may do so by first taking out an Associate Membership at a cost of three dollars.

The usual branches of the Winona School will be conducted as heretofore. Mr. Will Towles of Washington, D. C.,

will be director again for the sixth consecutive year. The trustees took steps to make the school more thoroughly efficient along strictly photographic lines than ever before. It was decided to employ a competent instructor who would have complete charge of the dark room and finishing department of the school.

Negotiations are now being conducted with one of the foremost authorities in that department of work in the country. On account of the congested condition of the school last year, it was decided to limit the attendance to one hundred students, so that it will be well for those desiring to attend to register at the earliest possible moment.

There is every indication that there will be a waiting list.

### PHOTOGRAPHS *Tell the Story*

#### Full Report Coming

Owing to the lateness of the returns and the pressure of business resumed after his absence in Louisville, Mr. Ralph Young's review and impressions of the Convention will have to appear in the next issue of Camera Craft. Look for it in the June issue.

PHOTOGRAPHS  
*Live Forever*

PHOTOGRAPHS  
*Tell the Story*





## Master Photo Finishers of America

A. E. Block, President.....27 Von Hillern St., Dorchester, Mass.  
 Fred. Mayer, Vice-President.....Portland, Ore.  
 Wm. J. Meuer, Treasurer.....212 State St., Madison, Wis.  
 Guy A. Bingham, Executive Manager.....Box 1020, Rockford, Ill.

### Territorial Vice-Presidents

South-Western States: W. F. Honnen.....1240 S. Main St., Los Angeles, Calif.  
 North-Western States: C. M. Coffey.....284 N. Commercial, Salem, Ore.  
 Mid-Western States: Chas. W. Lynn.....3917 Orleans Ave., Sioux City, Iowa  
 North-Central States: John H. Seamans.....7052 Jeffery Ave., Chicago, Ill.  
 Central States: E. L. Hurlburt.....315 St. Louis St., Springfield, Mo.  
 South-Central States: J. A. Hammond.....Box 650, Meridian, Miss.  
 South-Eastern States: Elon C. Robison.....105 Third St., N., St. Petersburg, Fla.  
 Great Lakes States: C. P. Phillips.....6930 Gratiot Ave., Detroit, Mich.  
 Dominion of Canada: W. A. Taylor.....274 Carlton St., Winnipeg, Man., Can.  
 Central Coast States: Wm. H. Eichner.....1210 "G" St., N.W., Washington, D.C.  
 New Jersey—New York City: J. G. Taylor.....24 E. 23rd St., New York City  
 New England States: H. K. Atkins.....Middleboro, Mass.  
 Mid-Eastern States: M. J. Koch.....535 Penn Ave., Pittsburgh, Penn.

### NATIONAL CAMERA WEEK (Formerly Take-a-Picture Week) May 20th to 27th, Inclusive

Sunday, May 20th, will mark the opening of the biggest concentrated advertising and sales drive ever launched for promoting amateur photographic sales and service. It will take the form of a nationally organized trade week in which an effort will be made to get hundreds of thousands of new cameras placed through the efforts of everyone interested in profits from the amateur photographic branch of the profession. This big nationwide sales program, while fostered by the 1,361 Master Photo Finishers in this country and Canada, has interested and is receiving the heavy backing of all photographic manufacturers, the photographic press, the druggist's associations and journals of the country, as well as every wide-a-wake photographic store, camera shop, commercial photo finishers and studios interested in finishing.

As in previous years, Master Photo Finishers will be able to use and supply a snappy glass trim for completely framing the glass of the thousands of photographic display windows which always is a big part of this big national trade week program.

The change from "Take-a-Picture Week" to "National Camera Week" was voted because many considered the phrase "Take-a-Picture" rather awkward, and because the new term will be more readily understood by the trade and the public. And—it also serves to some advantage in view of the fact that heavy stimulation of camera sales is to be added to the special

trade week program from this year on. Only about half of the homes in America possess cameras, and Master Finishers, by encouraging and making possible special sales on quantities of good reliable box cameras, hope to somewhere near approximate a camera in every home within a few years.

Those who are at all seriously interested in photo finishing, who are not members of the Master Finishers' Co-operative Association and who would like to get in on the distribution of display advertising for National Camera Week, and other benefits of the Master Finishers' Association—we suggest that you get in touch with Guy A. Bingham, executive manager of that organization, located at the association's national office—post-office address Box 1020, Rockford, Ill. The membership of that live and growing organization totals over 1,300 at this time and, according to the lowest possible estimate which can be made from volume of business reported by members when paying their annual dues, the Master Finishers handled over \$8,600,000 in gross finishing business last year. The association creates some thirty or forty pieces of advertising which are sent to members every few weeks throughout the season, and additional quantities of the same can be secured from their national office on a basis of "cost plus" for use by those who serve others. There are state divisions of the association with full quota of officers and regular state meetings in forty states, at this time.

GUY A. BINGHAM,  
 Executive Manager.



## Pacific International Photographers' Association

Embracing Alaska, Alberta, Arizona, British Columbia, California, Hawaiian Is., Idaho, Montana, Nevada, Oregon, Utah, Washington.

WILLIAM M. BALL, President; Corvallis, Oregon

### President Ball at the National

Our president attended the convention of the National at Louisville and it is needless to say impressed our eastern brothers with the importance of this great western territory and the strength and solidarity of our association. He was in the midst of things from the start and seemed one of the most popular men on the floor. His trip was one of concentrated business. The coast was covered and in specially called meetings he expounded the certified plan to such good purpose that he returned to his home highly encouraged and mightily convinced that photographers were awakening to needs they long had sensed but until now had not fully realized.

Returning from Louisville Mr. Ball stopped at Salt Lake City, Los Angeles and San Francisco and in each of these cities met the leading photographers and many of the officers and members of the local associations and went into the certified plan with them, minutely. Their reception of the proposition promises an

unqualified success for its immediate inception and carrying out.

From these facts the members will gather that our president had a busy trip and comes home with a sense of satisfaction in which his constituents have every reason to share.

### Hi-Lites Appears

The first issue, volume one, number one, is by now in the hands of every photographer and its attractive appearance and live text must have favorably impressed every recipient. On its pages President W. M. Ball gives an enlightening explanation of the accredited plan and the value of certification to the profession. The editorials reflect credit on the guiding spirit of the publication and the several prominent members of the P. I. P. A. who have contributed each added something to the cause, something worth while. We strongly advise any photographer within the territory of the P. I. P. A. who has not received his copy to so inform President Ball, who may be addressed at Corvallis, Oregon.

**CHIT CHAT**  
*About our friends.*



Ye Editor Retaileth Neues of Ye Profession and in Quaint Italics Titillateth Ye Sphynx with Hys Quill

### Boysen of Yosemite Valley

It is gratifying to help the cause of good photography by publishing evidence that conscientious work is not only a matter of ethics but good business. To evidence which J. T. Boysen of Yosemite Valley National Park received a letter from Andrew Pearson, Esquire, Montrose, Scotland, commending the developing of

his negatives and the making of prints and enlargements therefrom and by a following mail a generous packet of more films to finish and print. Mr. Pearson seems to be a liberal traveler and his experience constitutes him a competent judge. Our highest commendations to Boysen. May his kind increase. May his example be followed.

## CAMERA CRAFT

### Miss Reed Home Again

After the convention in Louisville our Miss Reed made an extensive round of the eastern and middle west cities where she contracted many of the advertisers and some of the readers of Camera Craft. Her experiences must have been pleasant, and why should they not, for she is back at her desk owning and managing the magazine again with a broad smile on her face and many an anecdote of incident and experience that dwells in her mind. A deduction made from her meetings with people and affairs brought gladness to us all. She gloats on the fact that, as she puts it, "Why! Our readers and advertisers are really our friends and they are unreversed in telling of the benefits they get from our magazine." She gloats and so do we all in these offices. That is what we are laboring for and that is the policy Miss Reed has sought to establish.

On telling her that I intended printing this notice she requested that all the men and women who helped make her trip and her stays in the various communities so pleasant be thanked and assured that the casual words she was able to express to them were only a small part of the feelings back of them. This, Miss Reed wants stressed to you, one and all,—when in the West make Camera Craft offices your home.

### North Dakota Association

One by one each natural division of the country is forming its association and projecting conventions to bring about closer relationship within its membership body. The third convention of this association was held in Fargo, N. D., on April 11th and 12th, and we have no doubt brought credit to the state and satisfaction to the members.

### Will Rounds Requiescat

Is there anyone with an acquaintanceship in photographic circles who does not recognize in Will Rounds, one of the large figures of the time? He did much, he helped many in his time, and now he has gone and those who valued his friendship will nurse his memory fondly. He lived rightly and well and on March 7th 1928, he died peacefully.

### Middle Atlantic States

A more compact, highly functioning organization than the above is hard to conceive. Every meeting brings about something of importance and each convention falls short of the importance of a national affair. At this year's gathering only the forenoon was devoted to sessions and lectures and the rest of the day remained free for viewing the exhibits. A new departure that was welcomed by all concerned.

### Gus Hofmeister

The trade refuse to recognize any Mister August Hofmeister. They know him, like him, and want him as Gus. He has made Ansco a byword in the west and from Seattle to San Diego, from the shores of the Pacific to the edges of the desert where Nevada slopes to the Salt Lake Basin, he has put the Red Carton and the Ansco Triangle in the public eye. These days he is darting about the country considerably and at this writing has just returned from an extended handshaking and order taking trip. We don't know how he contrives to write so many orders, unless it be by a trick of creating customers.

### William Horace Smith

The man whose pictures you admired in a former issue was amateur when that article appeared. He is now a full fledged professional with a well fitted studio, a substantially grounded schooling, an abundance of the best of taste, and a real and profitable patronage. What we consider best of all is that he is one more photographer who enters the profession with high ideals, unchangeable ethics, and a spirit of artistry. Watch him grow and listen to us say, "We told you so."

### Death of Mrs. Salzgeber

We learn with deep sorrow of the passing of Mrs. Richard Salzgeber, the wife of our friend at the head of Hammer Plate Company. Those who know the bereaved husband will appreciate and sympathize in his feelings and those who knew the lamented lady know that the world has suffered the loss of a good woman and devoted wife. The condolences of all connected with Camera Craft go to those who remain in bereavement.





# PHOTOGRAPHIC DIGEST

## The Preservation of Photographic Materials—Report of the Committee of the Royal Photographic Society

The subject matter of this report is one of the most important in the whole field of photography. The clearest picture of this generation, the most authoritative record of its history is enshrined in the thousands of photographs that chronicle it. If these photographs are fugitive, not only is the future robbed of information which past generations have been at pains to preserve for us, but the great mass of invaluable scientific records that can only be photographically made and recorded for future comparison (as for instance star charts), would lose their value. Furthermore, there is a growing mass of legal and governmental matter that is preserved entirely in the form of reduced photographic copies of the originals. Considerations of this kind induced the Government of Australia to apply to the Royal Photographic Society of Great Britain for advice as to how to preserve permanently the photographic material bearing on the history and development of that country. I append the report issued last month and draw particular attention to the names of the members of the committee, who for large practical experience and scientific standing could hardly be equalled by any similar group of men.

### Report of the Committee

The committee consisted of the following members: Dr. T. Slater Price (Director of the British Photographic Research Association), Chairman; Messrs. A. G. Agnew (Ilford Limited); J. Dudley Johnson, Hon. F.R.P.S.; W. B. Ferguson, Hon. F.R.P.S.; Walter C. Mann (Illingford Limited); A. Pereira, F.R.P.S.; F. F. Renwick, President of the Royal Photographic Society; T. W. B. Scott, Hon. F.R.P.S.; E. A. Robins (Eastman Kodak Limited); Olaf Bloch, F.R.P.S., Secretary.

Dr. H. D'Arcy Power, F.R.P.S., and Dr. S. E. Sheppard, acted as corresponding members. The best thanks of the committee is due to Messrs. Cross and Bevan, Dr. R. C. Farmer, Sir Herbert Jackson and Sir Robert Robinson for their kind advice and assistance.

### Introduction

The production of records by photography has been in existence for so short a period that the committee is not able to make any recommendations of which it can be said that their application will insure permanence for all time.

All that could be done was to select such processes and methods of treatment as were likely to give the most durable results. With regard to cellulose and cellulose acetate, it must be clearly understood that these materials are in themselves somewhat unstable, and that they are unlikely to be permanent when periods of hundreds of years are in contemplation.

### Recommendations

The following are the recommendations of the committee in regard to existing records on glass, paper and celluloid:

#### Negatives and Positives on Glass

Soak, preferably in distilled water, for half an hour, reflux in 20% plain tin-sulphate for four to five minutes (not more than five minutes), wash in running water for half an hour, harden in chrome alum ( $\frac{1}{2}$  per cent) for five minutes, wash for half an hour, dry thoroughly and varnish the warm negative with a shellac varnish. The following is a suitable varnish:

Shellac two and a half parts, alcohol twenty parts, dissolve, settle and filter.

#### Negatives and Positives on Celluloid

(a) Roll and flat films: These should be treated as for glass. There does not appear to be a suitable varnish for celluloid film. (N. B. It is important that

the washing after refixation, both in the case of glass and of celluloid, should be thorough. Invaluable films should be copied onto glass and stored as ordinary glass negatives.)

(b) Kinematograph film negative and positive: These should be well dried in a current of warm air before storage, and then should be packed in fibre lined tins, which must be as close a fit to the roll of film as is possible. The tin should be soldered, using a resin flux and a low temperature solder. These tins must be stored in a cool place in a temperature that should not exceed 40° F., in any case at as low a temperature as is possible. The regular examination of stored films every year or two is desirable, and after some years, or upon the least appearance of decomposition, valuable films should be duplicated.

#### Bromide Prints

A sulphide-toned bromide print is, in the opinion of the committee, more permanent than a non-sulphided print, and is at least equal in permanence to a print produced by any other method.

(a) Finished prints. A finished print, if not sulphide-toned, should be soaked in water, refixed in 15% plain thiosulphate for five minutes, washed for half an hour, sulphide-toned, washed for 15 minutes, hardened in chrome alum  $\frac{1}{2}\%$ , washed for one hour and dried. After drying it is essential that the print, if it is to be mounted, should be dry-mounted, and that the mounting boards or papers should be of as good a quality as it is possible to obtain. When a new print is being made, a natural surface paper should be specified, that is to say, one in which the bromide emulsion is coated direct upon a non-baryta coated pure rag paper.

(b) Mounted finished prints. If these are invaluable, and are not sulphur-toned and have not been dry-mounted, or if there is any suspicion of their permanence, they should be copied and fresh prints made. If they are in albums they should be removed (if slipped in) and treated as in (a). If pasted in they should be copied. After finishing, all prints should be thoroughly dried and varnished by immersing in a varnish of 15% solution of gum dam-

mer in benzol. There is a very slight tendency towards degeneration of the white on the prints by the use of this varnish. If desired this may be avoided by immersing the print in a 1 per cent solution of gelatine, drying and then varnishing.

Storage of prints. Prints should be interleaved with paper. This paper should be a pure raw photographic base. The packet of prints thus interleaved should be packed in two wrappings of wax paper. Storage should be in as cool and dry a place as possible and one to which noxious fumes (including the products of the combustion of gas) should not have access.

#### Addendum—Section 2

An alternative mode of storage is suggested by the Research Laboratories of the Kodak Company. The use of a wooden container with a wooden core is recommended; this would permit of the escape of any gaseous products formed during the slow decomposition of the celluloid. As before, a temperature not exceeding 40 degrees is desirable.

#### Section 3

(a) Sulphide Toning of Bromide Prints:

Stock bleaching solution: Potassium ferricyanide, 1 ounce; Ammonium bromide, 1 ounce; water up to 20 ounces. For use take 1 ounce of stock solution and make up to 20 ounces with water.

Stock Sulphide Solution: Sodium sulphide,  $\frac{1}{2}$  ounce; water to 10 ounces. For use take 1 ounce of stock solution and make up to 10 ounces with water.

Immerse the fixed and thoroughly washed print in the bleaching solution until the image is bleached. After washing it for a few minutes place it in the sulphide solution until it acquires a sepia color, and then wash the print for half an hour in running water.

Old prints that have not been sulphur toned may tone badly and present a poor appearance.

#### Tests for Silver

It is advisable to test the thoroughness of fixation by applying a test for the presence of free silver, and for the presence of thiosulphite. For the former take the drainings of the prints after washing is completed and in a test tube add a drop

of dilute sodium sulphide solution. There should be no darkening. If darkening occurs it indicates the presence of silver and the prints must be again fixed and washed.

#### Tests for Thiosulphite

In a similar manner add to the drainings a drop of very dilute permanganate solution. The pink color should persist, if it does not the washing is not complete, and the prints must be again washed. Blank tests should be made with the wash water used, both for the sodium sulphide and the permanganate test.

Concerning the above report I would like to add a few words. Its appearance was met by a rather odd and not at all pertinent criticism from the British Journal of Photography, who, neglecting the very definite statement of the report that a sulphided print was equal in permanency to any other, led off on a side track as to whether carbon and platinum were not more indestructible in themselves. Needless to say that neither of these media can be of more than occasional utility. Carbon tissue is quite commonly made with dye pigments of unproven permanency, nor is it adapted to the rendering of the fine details that are important in scientific records. Platinum may or may not be permanent, according to the brand of the paper and its mode of manipulation; both by reason of high price, non-adaptability to direct enlargement, and the facilities required in their production, which are quite limited in every day practical application. As against a properly made silver sulphide print, which the committee declared (and as I am assured by its Secretary, still declares) to be equally permanent under normal risks, they can offer no advantages whatever. In connection with this discussion I have added to my own certainty in this respect by cutting a sulphided bromide into four strips, whereof one was kept for comparison and the others subjected to the following treatment: They were soaked for one hour, respectively, in the following solutions:

- (1) Untreated.
- (2) 10% Hydrochloric acid.
- (3) 25% Sulphuric acid.
- (4) 10% Metabisulphite of sodium

acidulated with sulphuric acid, evolving  $\text{SO}_2$ . These strips washed and mounted side by side showed no changes whatever. Such treatment is far more severe than any probable injurious influence that a print is likely to encounter, and "ex cathedra" fulminations must abide the decisions of scientific experiment.

The advice of the committee is probably all that can be safely given with our present materials, although I would like to see the advocacy of sulphiding the image extended to images on glass and celluloid, but there is much work to be done before we can regard our photographs as having the permanency of Babylonian inscriptions. The future search must be for a basic tissue that will withstand heat and fracture. The chemists ought to be able to turn us out a synthetic silicate of the nature of mica that would fulfill these demands, whereon could be fused, if necessary, an image by the dusting on process. Meanwhile I am experimenting to give greater resistance to the bases that are in use.

#### Blue Spots on Sulphur Toned Prints

I suppose most workers have been bothered by this accident, the spots being of the color of a blue print and present in some sheets and absent in others. They are due to the presence of particles of iron in the paper that react with the ferrocyanide of the bleaching solution and are insufficiently affected by the sulphite. Mr. J. A. Court of the Booth Griffin Photographic Service, writing to The British Journal of Photography, states that they have found a practical remedy: "It is by the application of ammonia .880 with cotton-wool, or with a camel-hair brush for spots. Application should be made on both back and front of the paper, and for dense penetration several applications may be necessary."

It may interest our readers to know that Dr. Power is a resident of Germany and devotes much time to travel in England and Switzerland. Many interesting subjects are under way.



SALON WEEK  
IS COMING



EVERYPRINT  
A WINNER



# CLUB NOTES

## Forthcoming Exhibitions

June 1 to 15, 1928—Seventh Madrid International Salon. Address the Secretary, Principe 16, Madrid, Spain. Closing date, May 10.

June and July, 1928—International Salon of Holland. Address D. J. De Jough, Sweets de Landasstraat, 62, Arnhem, Holland.

September 17 to October 13, 1928—Salon of the Royal Photographic Society of Great Britain. The Secretary, 35 Russell Square, London, England. Closing date, August 17.

October 6 to 21, 1928—Twenty-Third Paris Salon. Address The Societe Francaise de Photographie, 51 Rue de Clichy, Paris, France.

## Chicago Camera Club

Some of the spirit of this aggregation of real fellows gets across the miles and reaches us through The Exposure. My word, but they are a bunch of hecklers. An evening at the club razzing and being razzed is more rejuvenating than a gland infusion.

P. W. says that all of us have made pictures that, though not original, were queer. Anent of an epigram himself hath coined, to wit, "We don't have to be queer to be original." In this standardized age, with juries establishing standardized forms of art and mount sizes, if we were original we certainly should be queer. How about that, brother P. W.?

And where does the editor get that stuff about Leap Year Casualties? If a member marries the club stands a good chance of getting a new member right away, and several new members as time goes on. Since wood alcohol has been found useless in the developer the good wives prefer 31 West Lake to many places as a resort for their hubbies. And what is better, they seem to like to come along.

That's the stuff. Bring in the girls, old and young. Give the babies a Memo or a Leica to teeth on and before they are weaned of the bottle they'll be squeezing the nipple of it as if making an exposure.

The twenty-fifth annual show was opened to residents of Chicago and vicin-

ity irrespective of membership. Of 300 prints submitted 117 were accepted and of that number 64 were from members of the club itself.

Due to the aggressive enterprise of Director Robinson the past year gave the club an opportunity of seeing the 72nd Royal Photographic Society collection, one-man shows by Alcock, Blickensderfer, Mortensen, Reiter, Sophie Lauffer and a collection from the masters who constitute the Pittsburgh Salon group. Good work, fellows, and a promise of better to come. Not better pictures, perhaps, but more of them, new names, new renderings, all toward the glorification of our art.

## California Camera Club

The following officers have been elected for the ensuing year and as the list represents the ticket as presented by the nominating committee without opposition, we may accept that the election was unanimous. Fine stuff and evidence of gratifying solidarity. The previous officers did well, the present will strive to do equally well, or better, beyond a doubt. Mr. Wilson has given of time and effort without stint and his accession to office is a deserved compliment and a fitting acknowledgement on the part of the members.

President, Raymond V. Wilson; first vice-president, Karl A. Baumgaertel; second vice-president, Carl Rabe; secre-

## CAMERA CRAFT

tary, Graham Lee; corresponding secretary, Miss M. J. Belvel; treasurer, Charles A. Bryant; librarian, J. A. Morrow; directors: William Pretsch, A. B. Stephens, C. E. Mertins, Edward Dreusike, Richard Boda, chairman.

That indefatigable and enthusiastic pictorialist, Dr. Max Thorek, has had a noteworthy collection on the walls through January and we are too much his friend to dare tell how well we think of most of them. What we say might be taken for biased. We can, however, take the opportunity of holding him up as a shining example. A surgeon at the head of one of the nation's large hospitals, a writer of books and articles on matters of his science, a lecturer here and abroad, he still finds or makes time to keep his camera and enlarging apparatus busy making pictures, not only good but showing a continual upward grade.

His charming secretary, Miss Larrabee is not so tied to social and business correspondence, the keeping of engagements, and routine, that she cannot help in keeping track of the doctor's contributions to Salons, exhibitions, and magazine competitions.

And we hear smaller men complain they haven't leisure to use a camera!

R. Boda won in the competitive exhibition of bromoils, several of the members were honorably mentioned and our own contributions were returned without comment—which is not surprising. The bromoil group is earnest and growing in number and ability. Several of them have already reached a point where they feel the urge to make it a regular practice.

In the March View Finder Edward H. Kemp has a really fine article on Amateur Movies. His point of view is conservative and kept within the bounds of fact. President Karl A. Baumgaertel's Photo Talks are constructive, interesting and should be carefully studied. We hear by the way that Karl has a surprise in store for us all. When shall it be, and who is she?

### Sophie Lauffer, F. R. P. S.

We note with pleasure that another of our American pictorialists has been honored by the Royal Photographic Society of Great Britain with a fellowship. Those who know Miss Sophie Lauffer and her high ideals in picture making with the camera will feel that she has brought somewhat of honor to the R. P. S. as well.



Portage Camera Club

If you lived in Akron, Ohio, where they make rubber tires and things, and had an irresistible urge to join a camera club, would or would not this aggregation of happy and kindly faces send you post haste to the secretary for an application blank? As Benjamin Franklin would say, And How?

Speaking of the above picture, did the camerist have one of Fellow Editor Chamber's Monkey on the Hand Dolls, or Birdie in the Cage? And will you note the wonderful rapidity of hand-motion of the lady in sables. Verily, the hand is quicker than the lens. Never mind, Portagers, perhaps we may have a chance some day to join in your smiles for an evening. It is seven years since we were in Akron and about time to think of going there again.

### Japanese Camera Club

The prints of Hori, an eminent Japanese photographer recently of New York were hung on the walls of the Japanese Camera Club of San Francisco during the week of April 23 and attracted much favorable comment from artists of his own people and Americans who had the privilege of enjoying them. Mr. Hori passed through this city on his way to Japan and his stay was an event in the pictorial colony. More and more our Japanese

## CAMERA CRAFT

brother photographers are endearing themselves to kindred enthusiasts by their wholehearted work for the best and their unselfish willingness to assist in any activity toward the betterment of photographic art.

### **Cleveland Photographic Society, Inc.**

The amenities continue to flourish in the bulletin of this society. Thus we have a letter from R. L. Van Oosting of the Los Angeles Camera Club and an excerpt from The View Finder issued by the California Camera Club telling about themselves and one another in a most fraternal way and proving that contacts are being maintained in the loveliest way imaginable. This is as it should be and when every Camera Club makes it a pleasant duty to get intimately acquainted with every other Camera Club the cause shall be benefitted immeasurably.

Judging from the programs projected and activities consummated all connected with this organization are always on tip-toe and eager to make their club better, bigger, stronger. Each member is entitled to his share of the credit but somehow the influence and example of Hartman shines out over it all. He is the man who put the dent in president.

### **Los Angeles Camera Club**

March was a full month and a good one. The social evening succeeded so well that it is proposed to make it a regularly recurrent affair. Max Factor gave a demonstration and talk on Makeup, how it is made and how it should be used for picture taking. Dr. T. C. Low showed some of his splendid slides and Dr. Spencer R. Arkinson lectured on Photographing Wild Animals by Flashlight. We note, also, that our southern brothers and sisters have revived stereoscopy, a well worth while and muchly neglected branch of photography.

### **Photographic Guild in Philadelphia**

During the month of April an exhibition of the bromoils of Dr. Emil Mayer of Vienna was held in the guild rooms and on the evening of the 18th Mr. Joseph Bing of New York City and the Camera Club of New York, himself a pupil of Dr. Mayer, gave a demonstration of bromoil making from start to completion. Dr.

Mayer's prints excited much favorable comment and an impetus has been given to that branch of artistic photography by the event. The Philadelphia aggregation attended in gratifying numbers and as many are already proficient in the making of pictures it is expected that the salons of the future will show many more bromoils from the guild.

### **Newark Camera Club**

At the annual meeting of the Newark Camera Club, Inc., held on Monday evening, April 9th, Edward Browaski, William L. Woodburn and Julius F. Graether were reelected president, secretary and treasurer, respectively, and Frank J. Hall was elected to the vice-presidency.

Chester B. Kohn was elected to the board of trustees and Lyman Lee and J. Van Reyper were reelected, all for a three-year term, with Charles J. Barkhorn and Marius H. Peterson as alternates.

The annual dinner was held at the Elks Club.

This month commemorates the fortieth anniversary of the Newark Club. My! My! Forty years of consistent ambition and enthusiasm expended on a hobby. What doesn't that say for photography? What doesn't that say for the men who undoubtedly, passed through vicissitudes personal and fraternal, and maintained their ideals and purpose?

The Ground Glass will probably give us some of the rich history of the club. We look forward to that issue and shall be one of its most interested readers. An amateur photographic club with so much of which to boast—Dr. Hannibal Goodwin who invented or perfected the roll film one of its early members; a respectable building and ample ground in the heart of a large city all its own; some of the foremost pictorialists in the land; these are bits of history that transcend local importance.

Here is our hearty wish that the Newark may find forty years but a milestone in the infinity of its continuance. If something should come along to take the place of photography may it continue to function, always up to the time but never so far ahead of its history and traditions as to forget.



**Portsmouth Camera Club**

Our English brothers forget that it takes several weeks for their announcements to reach our hands and that we go to press shortly after the middle of the month. Our friend M. K. Shephard will know from this that his letter of March 10 reach-

ed us after the April issue had been made up, but we are happy to announce that the annual exhibition is booked for May 9th to 19th, and will beyond a doubt bring a proud satisfaction to the members who labor so willingly for the cause of amateur photography.

# NOTES & COMMENTS

**Agfa-Ansco Consolidation**

News of far-reaching importance to the photographic trade comes in announcements of the merger of Ansco Photoproducts, Inc., and Agfa Products, Inc. The merger, under way for several months, was completed in New York City March 19th at a meeting of directors and election of officers of the new Agfa Ansco Corporation, which is chartered under the laws of New York State.

The new corporation takes over all the business and assets of Ansco Photoproducts, Inc., and Agfa Products, Inc., and acquires all of the capital stock of Agfa Raw Film Corporation. General offices are in Binghamton, N. Y., with branches in New York City, Chicago, San Francisco, and Atlanta. Agfa Roll Film will be sold during the current year from the New York offices at 114 East 13th Street, also from other branches, this division being in charge of H. B. Ridge, manager of Agfa Roll Film sales. Ansco Film will be sold as hitherto from Binghamton and the San Francisco branch. All motion-picture film for professional use will continue to be sold by Agfa Raw Film Corporation, 1600 Broadway, New York, of which Alfred Weiss is president.

The president of the new company is Horace W. Davis, who was president of Ansco. The other officers are: Dr. Walter Lenger, first vice-president and general manager; Carl Bornaman, vice-president in charge of camera production; Rudolph Worch, vice-president and treasurer; John S. Norton, vice-president in charge of amateur film and camera sales; Sherman Liall, vice-president in charge of profes-

sional sales; Otto von Schrenk, secretary; and C. E. King, assistant treasurer.

The board of directors of the new company is as follows: Walter H. Bennett, Wm. C. Breed, Horace W. Davis, A. W. Erickson, Ernst Friedlaender, Walter Lenger, Wilhelm Lohoefer, L. F. Loree, Herman A. Metz, Kurt Oppenheim, Albert Rothbart, Richard H. Swartwout, Almuth C. Vandiver, Otto von Schrenk, and Paul M. Warburg.

Richard H. Swartwout, who was chairman of the board of directors of Ansco Photoproducts, Inc., is chairman of the board of directors of Agfa Ansco Corporation, and Ernst Friedlaender is chairman of the executive committee.

The new company brings together Ansco, America's oldest photographic company, and Agfa, Europe's largest, a strong combination. Ansco, with extensive manufacturing plants in Binghamton, Johnson City, and Afton, N. Y., holds a prominent position in the American market with its Cyko, Noko, and other photographic papers, Ansco Speedex Film, and Ansco cameras, and a complete line of supplies and accessories. With the initiative and originality of Ansco are now combined the technical proficiency and resources of Agfa, world-famous for the quality and performance of its photographic products and a division of I. G. Farbenindustrie, A. G., of Germany, one of the world's largest business enterprises. The full benefit of its research laboratories will be applied to the products of the new corporation, and to that end plans have been completed and construction will be started immedi-

ately on a modern film plant which is expected to be one of the finest production units thus far created. This plant, howevering approximately 100,000 square feet of ground space, will be located adjacent to the present Ansco factories in Binghamton, N. Y.

The products manufactured and sold by Agfa Ansco Corporation include all types of photographic products; Agfa professional and amateur motion-picture film, Agfa Portrait Film, X-Ray Film, Agfa Roll Film, Agfa Film Packs, and Ansco Speedex Film; cameras for professional and amateur use, among which are the well-known Ansco Readyset and Memo cameras; standard and special-purpose professional and commercial papers, including Cyko, Noko, Nokoline, etc.; Agfa photographic chemicals, supplies, and sundries.

## Colonel W. G. Stuber Honored

W. G. Stuber, president of the Eastman Kodak Company has been appointed a colonel on the staff of Governor Flem D. Sampson of Kentucky in recognition, according to the announcement, of his achievements in the worlds of business and photography. Mr. Stuber is a native Kentuckian, and it was as such that he was honored.

Colonel Stuber came to the Eastman Kodak Company in 1894 after building up a photographic material business in Louisville. The responsibility for the success of the Eastman Kodak Company is in no small measure due to him. From the position of vice president of the Eastman Kodak Company in charge of photographic quality Colonel Stuber succeeded Mr. George Eastman as president in 1925 when Mr. Eastman became chairman of the board of directors.

## Artograph Products

The Artograph Screen Company of 128 Octavia Street, San Francisco, California has two instruments to offer the photographer which should appeal strongly to the needs of the time. The Artograph Diffusing Screen is in the shape of a cap which placed in front of any lens makes it soft-focus at a small cost. It does what is claimed for it and does it well. The

Distance Indicator is a vest pocket sized instrument and is the simplest yet devised. One looks through it and pulls out a telescopic slide till the focus is perfect. The engraved scale gives the distance. The cost of this device is almost nominal. It should pay every reader to familiarize himself with Artograph products at his dealer's or through corresponding with the firm.

## An Eastman Kodak Subsidiary

The Recordak Corporation has been organized by the Eastman Kodak Corporation, Rochester, N. Y., as a subsidiary, to make the Recordak machine, a photographic check protecting device.

W. F. Lovejoy, vice-president of the Eastman Kodak Corporation, will be president, and George L. McCarthy, inventor of the machine and vice-president of the Empire Trust Company, will be vice-president and general manager. L. B. Jones, vice-president of the Eastman company, will be treasurer.

## The Zeiss Ideal Camera

A plate camera accommodating, through double extension bellows, the additive Protar & Distar lenses, equipped with Zeiss Tessar f 4.5 and taking plates 3½x 4¾, or film packs. A beautiful instrument worthy of its makers and selling at \$82.50. Literature pertaining to same may be had by addressing the Carl Zeiss, Inc., management at 485 Fifth Avenue, New York City, N. Y., or 728 South Hill Street, Los Angeles, Calif.

## Daddy Lively the Modern Phoenix

You cannot keep so young, so enthusiastic a soul down. Along comes a fire and burns Daddy Lively out of house and home, consuming his livelihood and household treasures in one fell swoop, as it were, and as he gazes on the ashes and sneezes at the smoke, he plans beginning all over again in a better if not bigger way. He is ready to prove himself on his feet once more and announces that henceforth his time shall be devoted to intensively instructing Lighting. He proposes to concentrate the course into a single week's instruction, but will conduct advance classes for as many weeks as the applicants desire.

Added to Daddy's knowledge of photography is an agreeable personality and a

kindliness that makes pupils friends, and friends into members of a family. Under such tuition one must improve.

## Xenar Lenses on Graflex D

We are informed by Burleigh Brooks, American agent for the Schneider lenses, that when the new Graflex model D appears it will be listed with the Schneider Xenar f 3.5. This lens is of the same formula as the f 4.5 and is produced without a reduction of the number of elements. In other words the f 3.5, when stopped down f 4.5, is identically an f 4.5 lens. Those acquainted with the beautiful rendering of Xenar lenses will appreciate the ability to get a real Graflex with a real Xenar.

## The Eastman Show

A remarkable instance of what and how a great corporation may benefit an entire industry at the same time as it benefits itself is given by the travelling Eastman Motion Picture Show. In the best surroundings Cine-Kodak films are shown projected by the Cine Projector on, we have no doubt, an Eastman screen. As we saw it when in this city the subjects were well chosen, the pictures exceptionally well made and of the greatest general interest, and the method of exploitation quite perfect. It was essentially an Eastman Show but if motion pictures did not find an accretion of interest, if the general pleasure in making

motion pictures on the part of the public did not become aroused appreciably, and if motion picture cameras did not sell better for the event whenever and wherever it transpired, we are poor guessers. In the larger way the law that Service makes for Profit was exemplified correctly.

## Graf Lens Company

The former Graf Optical Company, erstwhile of South Bend, Indiana, has been superseded by the Graf Lens Company 306 South Wabash Avenue, Chicago, Illinois, and the attention of all is called to the fact. The firm has suffered some inconvenience and mail has been subjected to delay through letters addressed to South Bend having to be forwarded.

Friends of the Graf Variable and its motivating genius, P. F. Pfeil, will be interested in knowing both are still associated and ready to please the discriminating lens lovers.

## Museum Needs

If any reader of Camera Craft has a tintype or calotype outfit, the older and more obsolete the better, he will find it to his advantage to address T. C. O., care of Camera Craft, 703 Market Street, San Francisco. A prominent museum needs such apparatus to complete a photographic collection and this need enables the owner to help a good cause and realize materially on what otherwise must be useless impedimenti.



## Amateur Movie Making

When Herbert C. McKay undertakes to write a book on motion pictures one may take it as assured that from the richness of his experience and the fullness of his technical knowledge something worthwhile will be produced. In "Amateur Movie Making" he finds himself happily occupied in abundantly feeding an avid public. The book is worthy of better

summary than to say it is complete. It is unstinted in constructive information, even to a formulary and a dictionary of technical words and phrases. The paper and press work is worthy of the text. The binding in grained leatherette highly embossed in antique gold is a work of art. Falk Publishing Company, 10 West 33rd Street, New York City. 460 pages, priced at \$3.00 from the publishers or Camera Craft Publishing Company.



## Pollyanna's Debt Book

What have the Pollyanna books to do with photography? What has pleasure to do with photographers? Why should, and why should not, readers of photographic literature revel in the happy books of Harriet Lummis Smith? You answer the questions. But first read the latest of Pollyanna Annals. It is published by Page and Company, beautifully bound, and sells at \$2.00 by the publishers, at bookshops or through Camera Craft Book Service.

## The Latest Photo Miniature

The second part of Handling and Mixing Photographic Chemicals is now on the counters or may be obtained through Camera Craft Book Service. To praise these publications seems so futile to us. Their excellence so little needs praise and only as information to the waiting does this notice go forth. We trust no live photographer is without a Photo Miniature Library, but it should be kept up to date and made as complete as possible. Try your dealer, the publisher, Tennant and Ward, 70 Fifth Avenue, New York, or Camera Craft Book Service.

## The American Annual

A picture book second to few sold as such, a yearly summary of what has been discovered and achieved in photography that constitutes history, a formulary that makes the volume an essential of any library. If we were as clever as its publisher and succumbed to the temptation to be smart we might say some biting thing about the American Annual, but it should not be just or true, for in all honesty we should consider our camera without a lens no more incomplete than our bookshelf without the latest issue of this indispensable. The 1928 number is especially fine as to illustrations, and in saying its tables are as good as last year we are paying a high compliment.

## Das Deutsche Litchbild

This new German annual makes its debut under most favorable auspices. Its reproductions are just a little better than most, hitherto, and the selection of pictures shows greater discrimination. An art work in every way and reasonably priced at \$3.50 from the Camera Craft Publishing Company.

## The Spell of Ireland

Coincidental with the arrival in America of our distinguished visitor, William F. Cosgrave, President of the Council of the Irish Free State, comes the announcement from L. C. Page & Company, Boston, of the forthcoming publication of "The Spell of Ireland," which will make its appearance in mid-February. This latest addition to the popular "Spell Series," is contributed by Archie Bell, well-known newspaper man, dramatic critic, globe-trotter and author. Mr. Bell visited the Emerald Isle last summer so that he might write his Spell book on the spot. "I fell in love with Ireland," says he. "So much so that my English ancestors are doubtless turning in their graves."

There is a magic in the very name. Irishman abroad the wide world have in their characteristic way created a spell born of their humanity, love of mankind, service to their kind, and the music of Moore, the heavenly voice of John McCormack, the Lakes of Killarney, the warm friendship of the Irishman next door to you and me perpetuate the spell. Archie Bell has picked well; it is a beautiful book with beautiful text and beautiful pictures to which McCormack has written a foreword about Ireland and it is appropriately entitled "The Spell of Ireland." You will want this volume. It is published by the makers of so many fine books, Page and Company of Boston, and may be obtained through bookshops or Camera Craft Book Service for \$3.75.

## A Stereoscopic Magazine

The first number of Das Plastische Bild, a German magazine devoted to stereoscopic photography, has just come to hand. It was born in the month of January this year and seems a healthy baby with the promise of a long and useful life. Stereoscopes has, for some reason, fallen into innocuous desuetude in this country and even in Europe the ardent enthusiasm which once vitalized this beautiful branch of camera work has modified to lukewarmness and finds comparatively few advocates. Perhaps Das Plastische Bild may revive the interest everywhere. 'Tis a consummation devoutly to be wished.

# CAMERA CRAFT

RAPID SENSITIZATION  
OF CARBON TISSUE

by

THOMAS SOUTHWORTH



MOTION PICTURES  
FOR THE AMATEUR  
AND PROFESSIONAL

by

ERNEST M. REYNOLDS

SAN FRANCISCO

CALIFORNIA



*Gevaert*



# Saho-Super Saho Plates

*The Perfect Plate for the Pictorialist*

**HIGH SPEED**—500 H. & D. and 700 H. & D. Permits of a filter being used with the slower hand camera exposures.

**ORTHOCHROMATIC**—Excellent for exposures late or early in the day when the light is yellow. Good color correction at all times.

**NON-HALATION**—Against the light effects rendered without the objectionable flare.

Gevaert "**VERDINOL**" is a Desensitizer in a handy paste form.

*Descriptive Catalog on Request—Dept. No. 4*

**THE GEVAERT COMPANY OF AMERICA, Inc.**

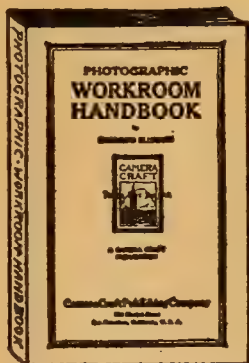
423-439 WEST 55th ST., NEW YORK CITY

CHICAGO, ILL.  
413-421 N. State St.

PORTLAND, ORE.  
345 Salmon St.

TORONTO, CAN.  
131 York St.

*Dealers in Principal Cities of United States*



*The Second Edition*

## Photographic Workroom Handbook

By SIGISMUND BLUMANN  
*Editor of Camera Craft*

**Will be out and ready for delivery in a short time**

The first edition in paper covers is exhausted and in accordance with its fixed policy, Camera Craft shares its profits with its friends by putting the surplus into production without increase of price.

This edition will be fully corrected, enlarged by several formulæ and

**BOUND IN CLOTH AT THE SAME PRICE  
ONE DOLLAR**

*At your dealer or from*

**CAMERA CRAFT PUBLISHING COMPANY**  
CLAUS SPRECKELS BUILDING SAN FRANCISCO, CALIFORNIA







AN EARLY MORNING CRUISE  
Pittsburgh Salon, 1928

*Paul Wierum*

# CAMERA CRAFT

*A Photographic Monthly*  
SIGISMUND BLUMANN, EDITOR

*Claus Spreckels Building, San Francisco, California*

FOUNDED MAY 1900

VOL. XXXV

JUNE, 1928

NO. 6

## The Fifteenth Pittsburgh Salon, 1928

By Ralph B. Bonwit

(Illustrated with reproduction of some of the prints hung.)

With the usual enthusiasm that accompanies this event, the Fifteenth Annual Pittsburgh Salon of Photography was inaugurated with the opening of the doors of the imposing Carnegie Institute to the public on Friday evening, March 16th. Despite inclement weather the first night brought a fine attendance. Saturday morning out-of-town fans began their influx with the rain changing to snow for their special benefit. To land in Pittsburgh on a snowy day is the pictorialist's dream, rarely realized. Sunday found the gathering enhanced by the arrival of a large contingent from Cleveland made up of the photographic society of that city, led by its energetic president, Ralph G. Hartman and H. G. Cleveland, secretary of The Associated Camera Clubs of America. The ever-faithful Bill Alcock, F. R. P. S., was among those present as were John Allen and Bob Barrows of Philadelphia, and many others.

No longer a mere organization, having earned its way into the realm of institutions, the Pittsburgh Salon draws all the camera men who can possibly take the time off and who live within a reasonable radius of the pictorial city.

All came with expectations of seeing one of those great exhibitions Pittsburgh is noted for staging, but never before have those expectations been so fully realized. Many who had viewed the Fourteenth Salon felt certain that the peak had been reached, but its successor most emphatically contradicted this. Dr. Coue was thoroughly corroborated. A seemingly impossible task was accomplished. The great "Fourteenth" had been surpassed by a proverbial mile. What next?

For those who must have their statistics, the following are offered. The fact that an even two hundred exhibitors show only



three hundred and thirty prints proves most conclusively with what care the jury made its selections. Foreign countries show fifty-four photographs from thirty-five exhibitors, these including Canada and the Hawaiian Islands.

Canada, 16; Czecho-Slovakia, 11; Great Britain, 5; Japan, 4; Italy, Germany and Australia, 3 each; Belgium and Hawaii, 2 each; Poland, Switzerland, Austria, Spain and Uruguay, 1 each. Strangely enough, considering the enthusiastic American support of British salons, only two Englishmen display their wares.

For the United States, seventeen states, including the district of Columbia, are represented. As usual, California leads the field with 76 prints, 49 by twenty-five workers from Los Angeles alone. New York follows with 46 and close behind is Illinois, all but three of this state's 44 prints coming from Chicago. Pennsylvania had 41; Ohio comes next with 20; then Massachusetts with 13 and Maryland, 10. Following are Connecticut, 5; New Jersey and Colorado, 4 each; Washington, Nebraska and the District of Columbia, 3 each; Arizona, Indiana, Missouri and Oregon, 1 each.

Ten processes were employed, if chloride and bromide printing may be regarded as separate mediums. Of bromides, there are 155; chloride, 60; the increasingly popular bromoil, 45; carbon, 13; bromoil transfer, 7; platinum, 6; fresson, 5; gum, 2; carbro, 2; kalotype, 1.

To mention every print that is deserving would require much more space than our generous editor could possibly allot us. Volumes might easily replace pages with still much left over to be said, so we will confine ourselves to the mentioning of those that appeal at first sight, though first glance is not always the best. Moreover, time is limited, for there are snow scenes, bridges, factories, railroad trains and what not, veiled in smoke yet to be "shot" and our hosts awaiting us outside in their machines to take us to the happy hunting grounds. Snow and light wait for no man.

As we enter the exhibition rooms our eyes fall upon Frank Roy Fraprie's wintry "Abington," in the highest of high keys after the fashion of a minimum line drawing or etching. The idea is carried out to perfection: Four vertical lines in the foreground, nicely subdued, a horizontal line in the distance on which are perched a house, two trees and a clump of bushes; that's all and quite enough to make it one of the big things of the show. "When Winter Rules," another snowy high key deserves all the nice things that can be said about it. This is the work of B. B. Conheim of Chicago. David and Eleanor Craig show three great bromoils, among which is "Christmas Morning," one of the best

CAMERA CRAFT



*Midsummer Day*

*Charles K. Archer*

*Pittsburgh Salon, 1928*



*Union Station Yards, Toronto*

*Richard Sydney Smith*

*Pittsburgh Salon, 1928*

made of these most photographed steeples in the world. There is a lovely lacey effect in the foreground formed by snow-laden trees. An iron gate makes an appropriate base. B. H. Chatto shows these steeples from the same viewpoint in an excellent bromide of lower key.

Mary Callaghan's "A View of the Le Puy," is well planned. The city is shown through an archway. H. G. Cleveland's "A Dull Day," proves the negative a little too soft for a bromoil. A snappy bromide print would have been better. George H. Morse has all four hung and the jury made no mistake. "The Parrish Slumbers" and "The Mooring Place" are two of the features of the salon, but his other prints suffer little by comparison. A. Aubrey Bodine's genre, "Pratt Street," is a rich brown carbro, showing the feeling and composition of the true artist.

Herman Brand of Toledo exhibits "A Misty Morning," mysterious and of beautiful print quality. Robert Barrows' "The Road in the Dawn," though the high light is massed to one side of the picture, is strangely well-balanced. His "Drifting Sand" is less impressive. C. C. Bohm of Chicago, has three: "Winter in the Elms" is a pleasing pastoral in soft gray and "The Morning



CAMERA CRAFT



*Jazzmania*

*John Ward Caldwell*

*Pittsburgh Salon, 1928*

Sketch" is an intriguing green bromoil in which the figure is intelligently placed, but the definition is a bit weak. Edwin Bolan also shows three: "Interlude" has a fine rhythmic feeling, quite in keeping with the theme. "Some Day" is most appealing. "Emphasis," by Hilary G. Bailey, was tricked in some ingenious manner so that the lady's face bears the angular and sketchy shadows of a magazine cover portrait.

K. Asaishi's "Books" forms a nice pattern. Very effective, though unphotographic, is his "Carnival Impression," which needs a more descriptive title. We're still at sea; looks like a lot of badly washed linen hung out to dry. Really, patterns are pleasing, popular and fashionable in these modern times, but let's not carry them to the extremes of riddle making.

Railroad scenes are only third in quantity to views of Pittsburgh and snow. One of the best is "In a Station—Chicago," by C. Frankenberger. A difficult job, well handled. "Beach Concert," by B. B. Fisher of Pacific Grove, could hang in any salon.

"Yankee Line of Beauty," by Ernest J. Dean of Toledo, strikes our fancy. Here the optical limitations of the short focus lens were brought into play in order to carry out a well-laid plan. Richard T. Dooner again shows  $2\frac{1}{4} \times 3\frac{1}{4}$  miniatures, for which he is nothing less than famous, and the three of them are above criticism. We would like to have them placed lower on the walls. John Morris, a Canadian neighbor, has "Salvation Serenade," an angular pattern, very nice. Valentine Sarra, New York, exhibits three, one of which is a particularly strong portrait called "Type of Character."

"The Future Hero," by K. A. Luther of Akron, is an amusing study of youngster in football regalia; a serious lad, who, imagining himself none other than "Red" Grange, is tackled by the photographer at the psychological moment of an imaginary touchdown. Drtikol's "Movement," one of his four on the walls, is a nude, at which type of work this artist is a past master. It is the official poster picture of this salon and wisely used for it is striking. Nicholas Haz hangs four prints, all of them featuring his marvelous technique and lens quality. "Pouf" we like best, but his rendition of a beautiful woman, "Frances Woodbury," is above criticism. Baron Mario Bucovich sent three from Berlin. "Cathedral at Elm" is purely decorative. The white spots at either side, near the top of the print, are very annoying.

That Samuel Lumiere knows how to make great portraits can not be questioned. His "Baron Patzthory (artist)" proves this. J. Ortiz Echague, that great Spanish master, contributes a magnificent portrait study, "Viejo Arrabelero" in Fresson. And



*South Wind*

*Victor Overman*

*Pittsburgh Salon, 1928*



*Sleeping Sea*

K. Nakamura

*Pittsburgh Salon, 1928*

what a gem it is! None can so well portray the character of each individual subject as Senor Echague.

Alexander Keighley shows three magnificent carbons of great size, all of them worthy of him. Arthur Moline of Chicago is represented by "In the Wind," a picture alive with action for the wind over the sand-swept dunes seems actually visible. Clayton W. Mogg, of the same city, has three. "The Hand of Man" is wonderfully mysterious and restful. Charles Miller of Brooklyn shows one of the best still life studies of the show. We refer to "Japanesque." Of Nickolas Muray we expect much and are in no way disappointed. All three, "A Study in Angles," "A Study in Lines" and "Miss Marilyn Miller" are enviable. Arthur Muray's "Desha" is a shining light of the salon. K. Ohara sent two masterpieces from Los Angeles called "Ocean Side" and "Evening Light." Both of them are attracting much attention and praise, and justly. "Ocean Side" proves that there is "something different under the sun." Here we find the surf gathering itself together to crowd through a narrow passageway formed by rocks, then spreading out again as space is gained and the spreading waters take the form of a lacey Spanish fan. "Evening Light" is a masterpiece of artistry and technique, the two bathers opportunely caught in the reflection of the sun on the wet sand; the



*Confidences*

*J. Ortiz Echague*

long foreground is nicely broken up by the fortunate presence of two birds and ridges formed by the waters on the sand.

Next our eyes are drawn to Joseph Petrocelli's "Pastorale Arabe," which carried off the gold medal at The Camera Club, New York's Annual Membership show. It should win many more honors. C. B. Seifert of Toledo has a very nice nude, well balanced, and of the good flesh quality, so important to figure studies. Isamo Ysuda of Los Angeles is among those with four up. "Glimpse" is a typical Japanese landscape. The dramatic clouds are well handled and the picture is altogether successful. "Sunlight, Grand Central Station," by Kenneth D. Smith, is a fine piece of work. It is a little unfortunate that the motion of the figures in the immediate foreground couldn't have been stopped, but Mr. Smith has overcome this, to a great extent, by judiciously subduing them in tone. William Rittase of Philadelphia shows four prints among which is "So This is New York," a very unusual piece of work printed through the back to obtain grain and obviously enlarged through a diffusing device of some sort which, by no means, helps the lens quality. John M. Caldwell of Honolulu submits a pattern, "Jazzmania," appropriately titled. It cannot fail to attract. The paper negative is on display, so simple a thought, and effective, that only one gifted with great ingenuity could have conceived it.

(TO BE CONTINUED IN OUR JULY ISSUE)

## THE TREASURED PICTURE

By JEAN LOOSE ALLEN

*Thank you much, kind stranger  
Who dwell across the sea;  
You've found my dearest treasure  
And sent it home to me.*

*On a bit of pale grey paper  
You caught a boyish smile,  
And sent it traveling safely  
O'er many a sea-swept mile.*

*Just the smile my boy keeps sacred  
For the one who loves him best:  
The sign which means "I love you  
Dear Mother mine—sweet rest!"*

*Your Camera's done what my heart,  
Howe'er it wills, can't do.  
It has caught that smile, and holds it  
To say his heart stays true.*

*So, thank you much, kind stranger  
Who dwell across the sea;  
For you've found my dearest treasure  
And sent it home to me.*



# Rapid Sensitization of Carbon Tissue

By Thomas Southworth

A short time ago I gave a brief account of a method for making genuine carbons by projection. Since that time I have secured a formula for sensitizing the carbon tissue which yields a degree of sensitiveness I had hardly thought possible and, to my mind, brings the carbon process strictly within the scope of practicability for any studio equipped with a flaming arc and condensers and an f4 lens. I feel pretty sure there are many photographers who, like myself, feel that for the extra amount of work involved in the making of a carbon print it ought to have a little size to it, and since this is an age of small negatives for projected prints, or at least, getting to be that way, and since it has been pretty generally felt that the making of a large carbon from a small negative involved the making of a transparency and another, large, negative therefrom, all of which the average photographer is not any too willing to do or try to find time for—also like myself—they just pass up this wonderful process for the simpler forms of picture making.

But I discovered, very recently, that the intermediate transparency and larger negative are not at all necessary for the making of large genuine carbon prints; I use the word genuine to remind you that the method has nothing whatever to do with the Carbro process. Since this opens up, to me, a new field of business possibilities, I'm very sure it must be equally as valuable to many others, and, may I add by way of parentheses, that since the outstanding question that comes before the various conventions and technical periodicals seems to be "How to get new or more business," I offer this, the making of Genuine Carbon Prints by Projection as of greater possibilities among the better class of photographers than anything that has been offered—in my humble judgment—for some time. My reason for making this statement is because of the very distinctiveness of the process; the wide range of color possibilities as well as of supports. It requires no acute brained salesman or woman to impress intelligent people of these facts, the unquestioned permanency of the carbon, the transparency and tone scale. At this point I hold the carbon between the prospect and the light. I use nothing but porcelain glass for support, and make only one size—11x14 suitably framed—the frames ordered specially for each color I use, and I use only such colors as are the furthest removed from the possible colors of ordinary photographs. My price is \$35, usually made up as a speculation proposition AFTER the main order has been delivered, or, maneuvered so as not to reduce the volume of business in ordinary photographs. In other words, I want to make the carbon orders pure "velvet," insofar as possible.

I use the Panchromatic films, exclusively, 5x7 only; the flashlight is my only illuminant. I make a negative not quite so heavy as most because all my work is projected, even if it is but to be the same size. (Paradoxical, but you know what I mean). I do very little retouching, usually almost none at all. The Pans don't need it, especially with children. Now then, projecting from such unretouched negatives, with the FRONT ELEMENT ONLY of my 2a Dallmeyer wide open, I get a beautiful soft effect on the screen that gets away from that of the regular anastigmat result, and yet does not go to that extreme of lens offered as soft focus lens. The effect strikes a happy middle ground, WIDE OPEN. Now if one has a single figure bust negative and the head is projected LARGE ENOUGH, I do no stopping whatever; if not so large, just the tiniest degree of stopping down should be done. This mild degree of softness and exquisite brilliancy, both of which are impossible with either anastigmatic or other multiple surfaced lens, yields results that withhold any evidence, in most cases, of the prints being projected. The contact brilliancy of the pep lights running throughout the face are all there and not degraded as are those of the usual projection print. Of course any retouching that has to be done, must be done finely; there will be barely any evidence of it, unless the lens has been stopped down too much. Let the center of the lens on the projection camera come opposite the face and let the other go. But what of the group? If the figures run rather close to the margins of the 5x7 film, there's nothing else to do but use the lens complete. But don't ruin the portrait effect by stopping down a particle more than necessary. (Many lens require, in fact most lens, a compensation adjustment when using the flaming arc. This represents about  $\frac{3}{8}$ -in. backing of the easel from the best visual focus). The lens doesn't HAVE to be a 2a Dallmeyer. I think the front element of any Petzval type will do, but I can't too strongly emphasize the importance of being as niggardly with the stopping down as photographers were with their Platinite during Platino days. So much for the preliminaries.

The carbon tissue is sensitized in a bath as follows:

Water 100 oz. Bichromate of Ammonia 6 oz. Cupric Chloride 88 grains. Used at 65 degrees Fahr. 2 minutes immersion. Heavy ferrotype plate slipped under tissue in bath and latter squeegeed with flat rubber squeegee. Ferrotypes previously waxed sparingly. Dried with electric fan in not too warm a place. This takes about half hour. The only actinometer used is some key negative from which a carbon has been made and the time for making it has been noted. To find the necessary exposure from any other negative about to be printed from, merely make an ordinary print test comparison, by contact, and go ahead on that finding. Provide the usual safe edge, of course, making a  $\frac{1}{4}$ -in. mask and using this in 11x14 printing frame trimming the 12x15 tissue to 11x14 FULL to fill the frame and after printing bringing this

down to 3/16 in. scant of size both ways to allow for expansion. When wet this will ALMOST reach the extremes of the 11x14 porcelain. After the usual squeegeeing, and 15 or 20 contact under reasonably even pressure, develop in the usual way. Time so as to avoid extremely hot water being necessary to get the print light enough. Flash the paper, or rather tissue, for about 2 to 3 seconds by drawing out the negative as the printing is completed after first capping the lens during the withdrawal. This is important if the tissue has just been sensitized. When development is complete, gradually lower the temperature with water right from the faucet, wash a few minutes and put up to dry. I have, so far, omitted the use of the alum bath for the reason that one may easily clean up the print with the image in tender shape with a rubber, used gently, and after spotting and airbrush work with water colors perfectly matching, the process is completed with two immersions in banana oil bath—drying between first and second, of course. No glass is necessary, when framing, and the banana oil will resist almost anything or any kind of abuse.

I respectfully offer the foregoing as a PRACTICAL way of increasing one's business, a plan that will build photography and not cheapen it. It will not, and is not, designed to enable one man to "get by" at the expense of some other photographer as many schemes are so designed. It's VELVET business, and requires no specially schooled salesman to put the sale over for the reasons of its distinctiveness.

And, by the way, that banana oil stunt can be used to advantage in many ways. Ordinary prints to be copied or for illustration purposes; give them a banana oil bath. They then become B stock. Ordinary photographs may be framed, after double mounting on melton board with Fiat rubber cement, without glass, thus glass reflections are avoided. Just let anyone put such a treated print in water and see if it is affected by moisture, or scrub it to remove the varnish.

The time of exposure from one of MY rather heavy negatives with the bath given, runs around ten minutes, with FINE ground glass interposed between light and (against) condensers. With a thinner negative that yields me a good bright print on Vitava C. with a contrast developer (Defender Salt Formula). This negative I have in mind is also a Pan, made with 1/2 grain Victor soft powder. I expect in the near future to make from this an 11x14 carbon in ONE AND A HALF MINUTES' PROJECTION from 5x7, with the bath given. In this case I can lay the ground glass aside because the negative is not so dense, and I shall, in just this instance, use the COMPLETE lens. Each one of these modifications will cut the exposure in half.

So, boys and girls, let's go to work and make carbons a while and give the public something new. Carbons on porcelain in the turquoise, or Vandyke brown or red chalk, or deep blue or sea green.



# Astronomical Photography

By J. F. Chappell

Lick Observatory, Mount Hamilton

(Illustrated by the Author)

(Continued from May Issue)

Out farther into the reaches of space the photographing of the many stars has developed along two methods. Direct photographs are made recording these remote suns as mere points of light. These photographs have the beauty of the sky itself and are of use for mapping and measuring the star positions and their sizes or brightness. The world of astronomers have wisely organized in order that this labor of mapping and recording the whole sky may be thoroughly done and standardized.

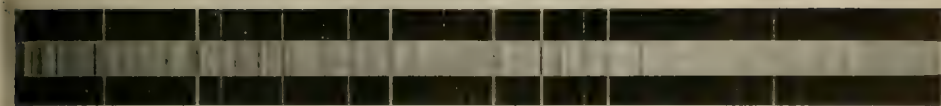
To locate stars on such plates it is necessary to identify and measure three by other means to give the so-called "plate constants," then positions for all on the plate follow. This saves direct positioning and is very accurate. Schlesinger<sup>9</sup> computed the cost of this photographic method for getting positions of 8 or 10 thousand stars to be less than that for 600 stars positioned by meridian circle.

The stars have been classed for size in two ways, first by their comparative brightness as it seems to the eye, and second as it seems to the camera. These two ratings have been standardized for stars throughout the sky. And the two ratings vary greatly, because the eye records especially the yellow green light, whereas the camera intensifies the violet,



*Mount Hamilton*

*California*

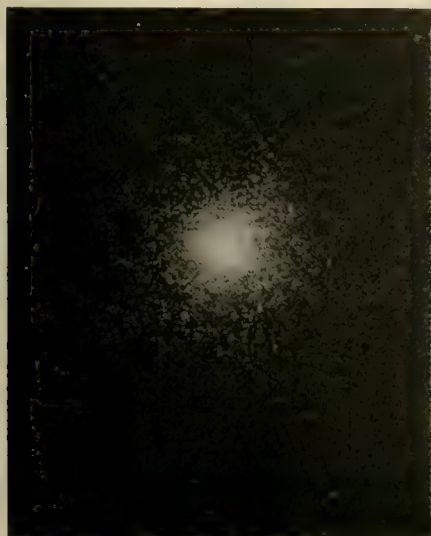


*Enlarged spectrum of Polaris, the "North Star"*

The central strip is from the starlight, the spectrum to each side being for comparison, taken from light flashed in at the camera and therefore being devoid of motion. The slight displacement of the lines show the stars' motions. (Plural because Polaris is a double, and the larger star of the pair is again a triple.)

and since stars differ greatly in color, one star may have two quite different sizes ascribed to it in the catalog. A double star having its two parts tending respectively toward the red and blue would be listed visually bright with faint companion, and photographically reversed to read faint with a bright companion. The listings for size have cost many a plate. The rating is spoken of as 1st, 2nd, or 3rd magnitude, the fainter stars being ascribed the higher number. *Aldebaran* (Alpha Tauri) is a 1st magnitude star photometrically. Brighter objects such as *Venus* are given a negative size. *Sirius* for example is  $-1.6$ . A sixth magnitude star is about as faint a star as one can see with the naked eye, but work is done photographically down to stars as faint as 21st magnitude.

The other general method of photographing the stars gives an image in which the waves of light have been separated and extended by the insertion of one or more prisms before the lens of the camera. The resulting band or spectrum is so revealing a bit of evidence that a whole new science has grown up called spectroscopy. The small spectrograms of individual stars when put beneath a microscopic measuring machine

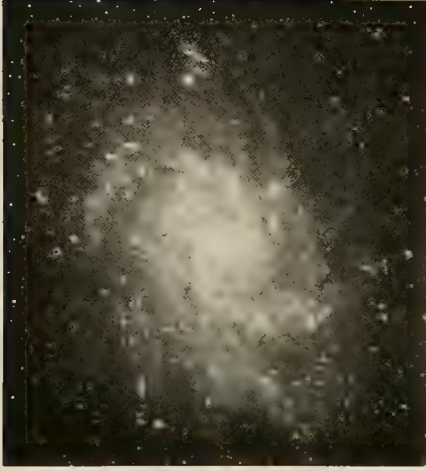


*Cluster in Hercules*  
July 13, 1899



*The Trifid Nebula*  
July 6, 1899

*Courtesy of Lick Observatory*



Great Spiral Nebula M33



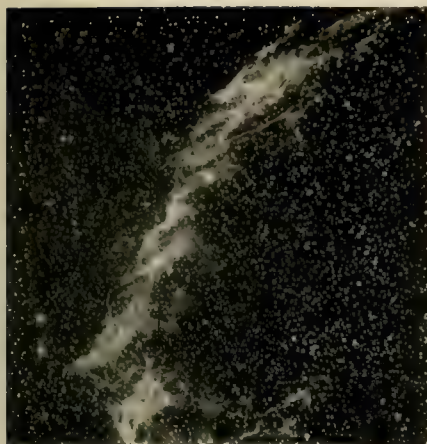
Trifid Nebula Messier 20

*Two beautiful and awe-inspiring Nebulae*

show not only the chemical composition of the star, but also how fast it is traveling toward or away from the earth. The image on these spectral plates is usually about two inches long and only about  $1/32$ nd of an inch broad. The labor of an entire night may produce only one of these tiny plates. Again, four or five may be achieved. The dark or bright lines that streak them are then painstakingly measured for displacement due to motion of the star; for intensity, revealing the star's temperature, and are identified to prove the star's chemical content. This spectral work is practically never direct visual work. The photograph eliminates errors due to atmospheric disturbance or wavering because it catches one instant of the spectrum. Also the photograph eliminates the personal element of error in vision and habits of interpreting retinal excitation. This dropping of what is termed the *personal equation* by using a print is even more marked in other lines of astronomy than spectroscopy, double star observations for example, although photographic methods here carry their own drawbacks, as defined later.

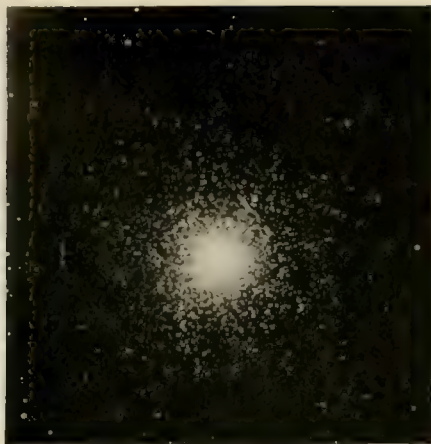
Even more important than the mere elimination of personal error, the photograph is so devoid of personal bias and intent or expectancy that it may record some item humanly impossible to have recorded, being either still undiscovered, or unclassified in the manner the photograph later reveals it to be existent. Therefore the maximum chance for new discovery and accurate record is achieved. On photographs taken today astronomers a hundred years hence may read messages we never intended to write for them, and may be able to verify facts of which we are not yet cognizant. A person records what he knows and sees, and predominately what he wishes to prove true, though it may develop later to be a falsity. But the camera produces an unbiased account, a marshal of





*The Hercules Cluster (M13)*

*Almost invisible to the unaided eye but containing ten times as many stars as one can see over the entire sky on a clear night.*



*Nebula in Cygnus*

*This offers a rather unusual regularity of star cluster and the fact that no spiral motion is visible is worthy of attention.*

details that cannot be other than fact and truth. The usefulness of this is proven by the fact that now we check present discoveries against early plates that hold details not particularly intended to be put on record by those who then observed the sky. For example, stars of the *Pleides* cluster have recently been redetermined from a collodion print taken by Rutherford in New York in 1865 to prove there has been practically no shifting in the group.<sup>10</sup> Also in this way new stars are checked, such as *Nova Geminorum* discovered by Turner at Oxford in March 1903 as a 7th magnitude star.<sup>11</sup> This was compared with a Harvard plate of March 6th and it showed as 5th magnitude. But on a March 1st plate which recorded stars down to 10th magnitude the nova did not appear.

Variable stars are a large group that are studied by more amateurs than are the other celestial subjects. Here photography plays a part of importance particularly with novae or suddenly appearing, brilliant but unsteady members of the group. Variation of any star is noted readily by the size of the image on two plates taken at different times. Photography also leads to easy detection of rapid *proper motions*. A device called a blink microscope is used on which two plates of the same field can rapidly be compared, the changing stars seeming to jump or blink, revealing themselves for measurement.

There are two other forms or types of object photographed in the sky: star clusters, and nebulae. The star clusters are an astonishing load for one small plate. The *Hercules Cluster* for instance, though almost invisible to the eye, contains 10 times as many stars as one can see with the naked eye over the entire sky on a clear night.

Nebulae are well mentioned as a climax in a photographic discussion: for they are the most fertile field for photographic endeavor. A

nebula is a hazy patch of light, either ball-like or ill-defined or irregular gaseous nebulae, or an odd spiral twist of scattered stars and fog-like light (spiral nebulae) that study is now revealing probably to be some separate universes. These are at immeasurable distances: how distant is only guessed at now by the discovery in them of a class of stars called Cepheid variables, which by a distinct variation of brightness proportionate to their period of light variation allow us to depend on the measure of distance of any group in which they may be detected. This Cepheid principle was recently discovered by a Harvard woman, Miss Henrietta Leavitt, and the Cepheid presence in spirals is still more recently discovered, affecting our conception of their distances. When a man wished to stimulate his sense of the bigness of his work, and impress his public with the largeness of his business he used to hang a world map on his office wall: what of the office of Astronomer Hubble for example, when he remarks he is examining "upward of a thousand spirals,"<sup>12</sup> —a thousand universes in transit over a four foot desk! In such an office the map of the world would be a steadying element of smallness.

Practically all of these nebulous forms so vitally affecting our new ideas and conclusions are invisible to the eye, and many even with the largest telescopes. They only appear with long exposure on a photographic plate. Guiding for them is done by fixing on some adjacent star. The delicate tracteries and filaments of nebulae are efficiently caught by the camera. A nebula (M 42) around one of the stars in *Orion's* sword has been mapped and measured for 250 years, but the great advance in knowledge about it has come during the last few years that it has been photographed.

(TO BE CONTINUED)

## SUMMER AFTERNOON

By BERT LEACH

*As softly as a sleeper's sigh  
Among the listless poplar trees,  
Creeps silently a baby breeze,  
Stirs thrice a leaf, and passes by.*

*In summer's glowing yellow heat,  
Across the glowing yellow plain  
Unpausing, pass and pass again  
The reapers in the yellow wheat.*

*Like children's boats, by one and two  
In careless frolic breathed away,  
Upon a little roadside bay,  
Are flecks of cloud in heaven's blue.*

# Camera Work of Moving Pictures For the Amateur and Professional

By Ernest M. Reynolds

Illustrated by the Author



*The author and his camera*

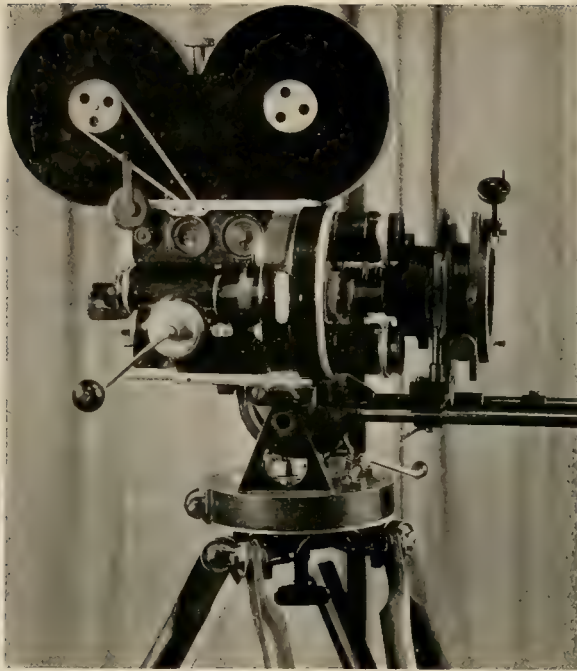
A lens should have the best of care. When not in use it should be covered with cap which is furnished with all lenses. Remove any dust which might collect on lens surface with a camels hair brush. Be extremely careful not to touch the glass with fingers, as a slight grease spot will result. To avoid this, after a lens has been handled, wipe gently with a substance sold by all supply houses under the name of lens paper or cloth. Never attempt to take a lens apart. If it needs to be "overhauled," send it back to the maker.

The tripod is a very important element of the camera equipment as it is seldom if ever that one is used without the other. Therefore, when choosing a tripod one should exercise the same care as in the choice of a camera. The panorama and tilting device is especially recommended when scenic pictures are to be made. The steadiness of the picture is largely dependent upon the rigidity of the tripod. Standard makes have a large bolt or screw which is set in the center of tripod head. The camera has a recess in its base which is milled to fit this same thread. It is imperative that the camera be securely fastened to the tripod to prevent a sudden lurch sidewise when cranking.

There are two types of motion picture cameras, one the compact, light news camera, the other a more pretentious instrument of somewhat larger proportions with all the various details and equipment for different effects in the production of feature pictures. This camera is commonly known as the studio model. As previously stated, the news camera should be compact and consistently light in weight. The tripod should be simple in construction, yet rigid enough to hold the camera steady. The panorama and tilting device on tripod are absolutely essential in news work. The average camera of this type holds two hundred feet of film, which is more than enough to use on one news item. Speed in setting up and getting into operation are of great importance in this branch of camera work.

The studio model nearly always carries at least four hundred feet of film. Of course, the same general principles are embodied in this type





*The Author's Camera*

of machine as in the news camera. A number of interchangeable lenses are generally included in the studio camera equipment. These lenses are sometimes mounted upon a revolving turret and the different ones swung into position as desired. A more common, but less convenient way, is the one lens holder or mount, and different focal length lenses slipped into same. There are three different focal length lenses which are generally used: the two inch, three inch and six inch telephoto lens. The two inch lens is used almost universally, but now and then occasions arise when one cannot get quite as close to the subject as thought best and it is then that the three inch lens comes in handy. The six inch is rarely used, but like many other things, when needed, nothing else will do. A distant subject can be brought up to comparatively close range with this lens.

There are many types and makes of lenses on the market, but there is really little difference in the standard makes. As in any other line of extremely delicate manufacture, now and then there will be one above the average and vice versa. There is also the faster or speed lens, as it is sometimes called, which is made to give faster speed or illumination on the film than the regulation  $f:3.5$ . The fast lens surely has its decided features as when photographing very late in the day or in poorly lighted interiors.

We also find a lens made to give a soft, delicate appearance to the picture. This is known as the soft focus lens. Its use is decidedly

limited and should not be attempted until one has a fair knowledge of the photographic art. Many feature pictures have had their artistic value materially raised by the use of soft focus effects, and it might be added, many would have been just as good with it left out.

As a rule, a motion picture photographer has his pet lens and it is quite natural to suppose that some of his best work was done with this lens. Undoubtedly, another make of lens, of the same speed, would have yielded just as good results, but as this particular lens did good work on a few outstanding occasions it has branded itself in the eyes of the user. As a matter of fact, it is really hard to tell the difference in work of any one (one) of a half-dozen different makes of cinematograph lenses.

## Some Impressions on the Convention at Louisville

By Ralph Young



*With characteristic modesty, Ralph has omitted mention of his own part in the program and its success. From several critical and discriminating attendants we have been assured that his talk and demonstrations were most entertaining, not to say instructive. Personally we know Ralph Young, and particularly we have before this been impressed with his unostentatious way of putting over big things; his pleasure in doing, which is a potent factor in the giving of pleasure to his audiences. What he has failed to say of himself we tell herewith and leave the stage to him—S. B.*

No jeweler could have chosen a more appropriate setting for a precious stone than the officials of the Photographers' Association of America did for their 46th Annual Convention. Kentucky, the name itself spells romance, and we all love to linger over the musically phonetic Louisville.

The Jefferson County Armory, where the convention was held, was transformed into a typical Southern scene. At one end appeared the exterior of an old Colonial mansion with its identifying pillars and spacious veranda. As you walked among the exhibits of the manufacturers' you had the illusion that these were placed on the lawn before this beautiful old home. To strengthen this atmosphere a negro banjo quartet, dressed in plantation costumes, strolled about the hall playing Southern melodies. In the evenings

more negro entertainment—And how those darkies could dance!—their rhythmic abandon was contagious—ask our friend Richard Speaight from London!

The picture exhibit this year was unusually fine; the quality of prints set a high standard and the great variety of subject matter was especially inspiring. The general public was admitted each evening at a nominal price, and they came in great numbers. This was to me an interesting fact for it proved that people were interested enough in photographs, as well as automobiles, to pay to see them.

The program had been so carefully planned to cover the field of professional photography that each visitor was able to learn something new about his particular branch of work as well as to gain a broader view of photography generally and its sale and exploitation value to the public.

The business side and sale of photography was discussed by James Elliott, president of Underwood & Underwood, New York, in a lecture titled "A Business Man's Picture of the Future of Photography." Mr. Elliott is not only a practical man but also has vision. His subject was well thought out and the presentation interesting. Frank L. Blake of Chicago told of the new fields opened up for photography by the rotogravure supplements. He stated that about 50,000 photographs were used during 1927 to illustrate the advertisements in rotogravure sections of the newspapers.

Professor Alvin C. Busse and Richard C. Borden of New York lectured on "Principles of Salesmanship." They showed that there were certain underlying principles which apply to every sale and demonstrated how these could be applied to the sale of a photograph.

The National Advertising Campaign was discussed by its "father," George Harris. He told of the results already achieved and of the contemplated work for the coming year. Papa Harris' baby is a two million dollar kid. Some baby! But then George is some papa.

L. W. Rand of Brockton, Massachusetts, illustrated, with charts and forms, a practical cost system for the studio. He showed that a proper use of this system would immediately increase the studio owner's profits.

Photo finishing and its progress was the subject which was well handled by David Merriam of Minneapolis.

A talk on studio decoration was given by I. T. Frary, an interior decorator of many years' experience.

Richard N. Speaight of London, titled a particularly interesting talk "Inspirations." It was indeed inspiring, for Speaight has the knack in his talk of giving you an insight into his most charming and delightful personality. The complimentary exhibit of his prints introduced you to an artist, both of life and of his craft.

Clarence Stearns of Rochester, in his unassuming, charmingly quiet manner, talked on personality. He felt that the photographer's business is such an individual one that success was in a large measure achieved through cultivating a pleasing personality. Clarence Stearns, to all who know him, is surely an example of "pleasing personality."

The smaller cities were not overlooked as fields for the sale of more photography and James Thompson, who has made a success in a small city, told of the possibilities for commercial photography and how to stimulate sales.

Pirie MacDonald in "Catch Them Alive" scored his usual and effective dramatic success as a vital, interesting and instructive speaker.

Charles F. Townsend of Des Moines gave a practical demonstration showing how he achieves some of his beautiful and artistic effects.

The moving pictures which have such a decided influence on commercial



and portrait photography, were represented by Charles Roscher and Joseph A. Dubray. Both of these men are deans in their profession. Mr. Roscher has been for many years the chief photographer for Mary Pickford.

Mr. Dubray and Mr. Roscher demonstrated some of the beautiful lighting effects which are talked of today in the movies.

This brief resumé gives at least a faint idea of the convention program which to me was the most interesting one I have ever had the privilege of attending.

The convention came to a close with an elaborate and colorful banquet where goodbyes to the old and the new friends were said with a touch of sadness in the voice and a sincere regret in the heart. Not goodbye, as I think of it, but *au revoir*: for we shall meet at the next, and the next, and ad infinitum to the last that we can attend. When we can no longer be with our fellow-craftsmen on these occasions, it shall be because we have left our cameras on earth and have taken to celestial jazz on the harp.

## Bromoil Portraits

It has frequently occurred to us that the professional photographer is peculiarly lacking in enterprise in that he sticks so closely to the beaten path. "Big money" is to be made by big and new ways. One picture may be so much better than another as to command a higher price, certainly to be of higher value, but as photographers improve—and the modern professional is a very thorough and highly skilled artisan, often an artist—there is an equalization of values in the pictures themselves and distinctions must be achieved by means and methods. Bromoil as a means of expression is newer than gum or carbon. It is different from these and one bromoil is different from another in a personal, vital way. Prints in ink are at least as lasting as platinum, carbon or gum. By the way, no print lasts any longer than the paper on which it finds itself. A picture made with a brush and by hand, a method allowing of unlimited control and freedom for the expression of individuality, is very close to the much discussed high art that is sometimes denied photography and certainly is not always proven by paintings. Thus a well-made bromoil may be conceived as commanding a high price from a clientele who are willing to pay from \$60 to \$125 a dozen for straight photographic portraits. This article from the British "Journal of Photography," to which the author's name is not appended, should carry a message to the profession all over the world.—S. B.

In most photographic exhibitions an appreciable proportion of the pictures shown are by the bromoil process, and they are almost invariably the work of amateurs. Professional photographers, and more particularly portraitists, have hitherto treated bromoil with a certain amount of contempt, which is probably due to a lack of knowledge of the process. This ignorance is in course of removal by means of demonstrations by some of the paper manufacturers, but much remains to be done, for even now it would be safe to assume that not more than 5 per cent of professionals could give a brief outline of the process.

As with all new introductions a good deal of pioneer work has had to be done to remove the stigma of uncertainty which has lain heavily upon the process. Even experienced workers met with inexplicable failures, such as prints pigmenting as negatives, and other troubles it is not necessary to detail here. But perseverance has prevailed, and paper manufacturers have found it worth while to prepare special emulsions for bromoil. The result of this has been that anybody of average intelligence and carefulness can now make a print with a practical certainty of its turning out well.

Bromoil is no process for the rush worker, every detail having to be faithfully observed, but on the other hand, the work can be carried on stage by stage as opportunity occurs, and so is not too exacting even for a busy worker. The necessary bromide print or enlargement can be made by any careful assistant who will follow instructions, but the bleaching and, certainly, the pigmenting or "inking," should be the work of the man whose name it will bear.

An important feature from the professional point of view is that bromoil is second only to platinum in point of permanency, ranking with etchings, photogravures, and well-printed books, since only the same materials, good paper and first-class printing ink, are retained in the finished product. The silver of which the original image was composed is entirely eliminated after its function of assisting to tan the gelatine locally has been performed.

Omitting working details, the procedure is as follows: A good bromide enlargement is made in the ordinary way, using amidol or metol-hydroquinone, and is fixed in a solution of hypo free from alum or other hardener; it is washed as usual and, with or without intermediate drying, is bleached in a solution which is usually composed of copper sulphate, potassium bromide and potassium bichromate. It is again fixed in a plain hypo solution, washed and dried. When it has to be pigmented it is soaked in water until a small amount of relief is visible. It is then placed upon a glass or other firm slab, and an oil pigment, which is virtually lithographic printing ink, is applied with the tips of the hairs of a specially made brush. Gradually the pigment attaches itself to the shadows and half-tones, and is repelled by the high-lights. As soon as this stage is reached the result is in the hands of the operator.

Although many ordinary brands of bromide paper will answer for bromoil, many are quite unsuitable, and this has been the cause of most failures. It is better, therefore, to select one of the special brands, Wellington, Kodak Royal (bromoil quality) and Illingworth being the most popular. The special brushes made for the purpose must be used, and it is seeking for trouble to attempt to use ordinary artists' oil colors or printing inks. An expert might manage with the latter, but the novice cannot hope to do so.

It has been stated above that the process can be carried out in easy stages, a consideration to a busy man. These stages are, the making of the enlargement, which will keep in condition for several months; the bleaching, after which the dried invisible image will keep for weeks, if not months; and the soaking and pigmenting which will occupy an hour, more or less. It may be remarked that a variety of pigments in various colors such as black, grey, burnt umber, sepia, Italian green, dark blue and red chalk are available, all of undoubted permanence.

The photographer who essays this process will find it of great value for finishing enlargements, as the fine stipple given by the brush effectively obliterates any grain, while unsightly detail in the background can be covered or given another form. It is possible to obtain a light or dark background at will, and to vignette if desired. The finished bromoil should be kept in a warm dry place for several days, and may then be mounted either by the dry or wet process. If dry mounting be chosen, care must be taken to dry the pigment very thoroughly or it may stick to the mounting plate. In case the pigmenting is not satisfactory at the first trial, the pigment may be cleaned off with benzole or petroleum ether and a fresh start made, so that first trials need not be costly. It is better to allow the gelatine to dry before cleaning off the pigment.

It must be understood that bromoil is only suited for a good class clientele, for only a cultivated client will appreciate it and be willing to pay an adequate price for the photographer's skill.—British Journal of Photography.

# Cause of Shadow Bands When Lighting With Alternating Current

By La Verne Ryder, R. P. S.

(Illustrated by the Author)

There is a peculiar banding which occurs at times when taking both still and motion pictures. This banding only occurs when alternating current lamps are used as a source of illumination. In motion pictures, it takes the form of blank, or nearly blank, frames and, in still pictures, as bands of shadow.

This can easily be explained when using direct current at the arc, as a feeding drop of the arc, which may occur at the time of exposure and, in still pictures, is likely only to happen when a very short exposure and one arc lamp is being used.

When lighting with alternating current (commonly referred to as A. C.), the question is entirely different and some very interesting experiments may be carried on with surprising results.

First, let us see why these bands may occur and, later, what effect they have on our negatives.

A thorough study of photography leaves little time for a study of electricity, but some knowledge of electricity is essential, if one is to understand the cause of our shadow bands.

The current as furnished us by our power companies may be divided into two classes, mainly, direct, or D. C., and alternating, or A. C.

Direct current, flowing in a pair of wires, has a positive and a negative wire, or pole, and the flow is constantly in one direction, so that our arc lamp burns steadily, except when the carbons burn too far apart, the arc breaks and (if the lamp is automatic) the carbon is fed, or allowed to drop, to form a new arc as it is lifted by the magnet coils.

Alternating current is entirely different in that the flow is not constant in one direction, but reverses, or alternates, rapidly. This alternation may be called a reversal of polarity—that is, one lead, or wire, becomes alternately positive and negative—always, of course, in direct opposite to the other lead. This may be illustrated simply by Figure 1.

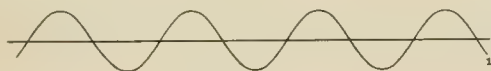


Figure 1

This alternation, or pulsation, is usually rapid enough to look to the eye to be steady, though I have found places where it was plainly visible and, in fact, very unpleasant.

The rate of alternation per second is used to designate the cycle of the current, as 25, 60 or 90-cycle.

Common practice now calls for 60-cycle, though, in some cases, many different ratings are used. The 60-cycle shows practically no flicker and appears as almost steady when used on incandescent light, or arc lamps. While near Niagara, New York, where 25-cycle is used extensively, one can, in incandescent lamps, see a distinct flicker and we were unable to make our arc lamp burn satisfactorily.

At the time of this pulsation, or beat, the light is maintained only by the glowing, or incandescent carbons, or filament, so that many times per second



(the number depending on the cycle rate) the light is dependent entirely on the glowing carbons, or filament.

When using a between the lens shutter, this need cause no great worry, as the alternations are extremely rapid and, unless you use a very short exposure, you will carry over several beats. With very short exposures, it is possible to have a blank, or badly under-exposed negative.

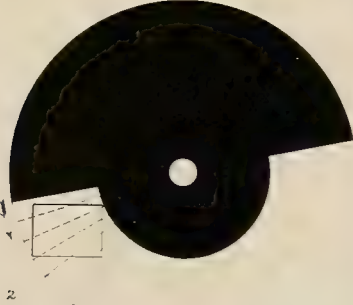


Figure 2

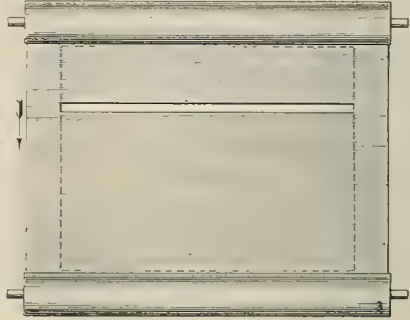


Figure 3

With a rotary shutter, as used on a moving picture camera (see Figure 2) and remembering that you are taking sixty feet per minute, with sixteen pictures to the foot, you can readily see that the chances of blank frames are very good—in fact, we often find not exposed—under-exposed—and shadow-banded frames. It is well to remember that this trouble is not corrected by the use of more than one arc, as the alternations affect all of the arcs at the same time when they are fed by a common supply of current.

The focal plane shutter (Figure 3), as used in Graflex, Reflex and other cameras, is where we encounter most of the shadow band trouble—in fact, conditions may be made nearly ideal, so that we may be sure to get perfect (?) bands.

We should all be familiar with the curtain form of shutter where we pass a slot in the curtain past and very close to the film, or plate.

This slot is usually capable of being varied as to width and speed of travel and it is where a narrow slot, with high speed, is used, that we encounter most of our trouble.

As an example, say we are using a slot of one-eighth-inch and a tension of six (Graflex), giving us an exposure of  $1/1000$  of a second. This means that all parts of the film must receive  $1/1000$  of a second exposure and that on a  $5 \times 7$  film, as the curtain travels the five-inch way, the total time of travel must be  $40/1000$  of a second. Now consider your 60-cycle arc. It will pulsate sixty times per second and pass an incandescent point 120 times per second.

The total elapsed time of making an exposure is, as we found,  $40/1000$  of a second, so you can see that we have a chance of showing  $4 \frac{4}{5}$  shadow bands (see Illustration 4, Print A).

The use of a narrower slot and slower tension will, of course, give us a chance at more bands and inversely a wider slot and higher speed of travel will give us fewer bands.

The solution of this trouble seems to be a wide slot where more film is exposed at a time, as with the wide slot, while these pulsations will occur, we have less chance of showing them as individual bands, for the exposure is spread over more surface and will not affect a small band across the film.

With a wide slot and high tension, another peculiar thing happens—the bands are no longer uniform, but in groups with places where very little

## CAMERA CRAFT

shadow shows. This grouping becomes more pronounced as our speeds are reduced, though the shadow bands are more faint.

Grouping of bands is easily explained. If we will consider any one point on the exposure surface and remember that the shutter opening is traveling past at a nearly uniform speed, we can see that this point may be started to expose just as the light pulsates and may have a chance at many more pulsations before the aperture of the shutter passes. The result is a shadow band varying in color in proportion to the number of pulsations.

A point very close to this may have more or less pulsations during its exposure and will vary in the same proportion.

These bands are plainly visible in B-C-D-E of Illustration 4.

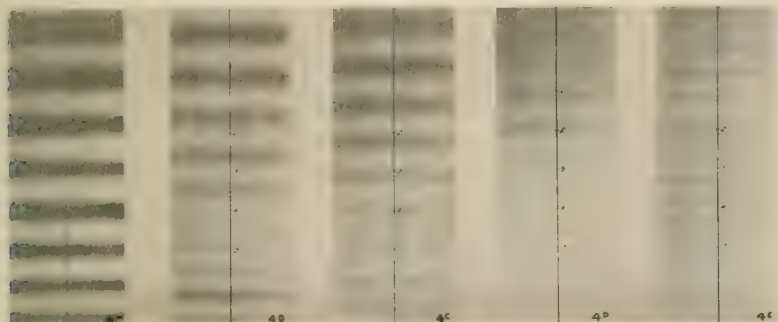


Figure 4

Referring to Illustration 4, Print A, we find that while with 60-cycle current and 1/1000 second exposure, we should have  $4\frac{4}{5}$  bands, we, in reality, have 8. Now we can be very sure that 60-cycle is 60-cycle, as the control of the modern power plant is very accurate, so, evidently, our shutter is slow.

Testing the shutter speed with our large tuning fork shows a varying exposure of from 1/450 to 1/650 on the set of 1/1000, so our alternating current may be used as a fairly accurate shutter test, as our 8 bands, when we should have only  $4\frac{4}{5}$  gives us approximately this same result, of around 1/500 of a second.

This need cause no worry, as we are told by the manufacturers that the markings of these shutters are approximate only and the 1/1000 second marking is, in reality, around 1/600 or 1/700, as a true exposure of 1/1000 is impractical on account of under-exposure in too many cases. The lower speeds, however, are as close as 80 per cent accurate with the markings.

We can also notice a uniform narrowing of the bands which can, of course, be accounted for by the acceleration of the curtain after it is released.

We have, so far, shown only illustrations made with arc lamps. Let us now try nitrogen lamps.

Here we find somewhat different conditions, as the heated filament radiates much light and, even at the low point in the current cycle, gives enough light so that shadow bands are hardly noticeable even at high speed. Of course, the increased number of lamps for the same amount of illumination as the arc is a disadvantage.

Conclusion: From the experiments made so far, it seems to be impractical to try to use alternating current arc lamps alone, as a source of illumination in focal plane work, and that fair success may be expected with filament type lamps. This would indicate that a combination of both arc and filament type lamps is the solution of this problem, as the filament lamps will carry over enough light to cut the bands down to where they are not noticeable.

## CAMERA CRAFT



FIRST AWARD PRINT

*Horace Tyzack*

### JUNE 1928 COMPETITION

#### Advanced Pictorial

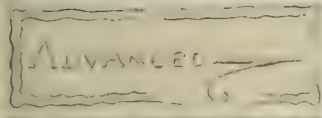
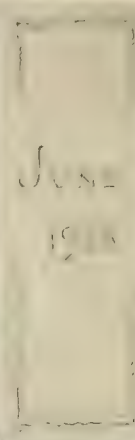
S. M. Abellira  
Edward Alenius  
Frank Asuhisi  
Adolph Bauer  
Fr. Bowmann  
Guillaume Brizzoli  
Baroness Chiari  
M. K. Curtis  
Harold Dempsey  
Rene Dupre  
Mrs. W. F. Eldridge  
Dr. Landry Elphston

Tomihisi Furuya  
F. W. Gaumonde  
Miss May Goodman  
A. Y. Hara  
Miss M. Havers  
Dr. P. Imatusani  
Matthew Jephson  
Olaf Johanson  
Dudley Lee  
Mrs. Ed. Matthews  
E. A. Nievera  
M. A. Obremski

V. Orlando  
K. Ota  
Fr. Pfennigbauer  
J. F. J. Raoul  
Dr. Max Thorek  
T. K. Tsukane  
H. Tyzack  
Anton Veilch  
Firenzo Vicento  
W. A. Watson



## CAMERA CRAFT



SECOND: *E. A. Nievera*  
FOURTH: *Fr. Pfennigbauer*

THIRD: *Edward Alenius*  
FIFTH: *Tomihisi Furuya*

### To Our Readers

Half a year has passed under the new rules of our competition. The cash awards are not so far away, the Silver Cup nearer the Club shelf. Whether you liked the old plan better or prefer the new, come in. We changed to please; we shall change back to a newer plan if it pleases you; we want to make this proposition for your pleasure and profit.



FIRST AWARD PRINT

*W. A. Watson*

## JUNE 1928 COMPETITION

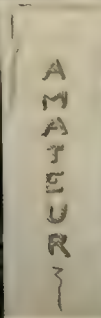
### Amateur Pictorial

Miss Emma Alenius  
Herb. Atwood  
Miss Frances Bates  
J. L. Brendel  
H. Bretsch  
Arthur Bulovich  
J. Cipino  
Adolph Cratz  
Burchall A. Delmar  
Miss Elsie Duane  
Ronald V. F. Dufour  
A. Edelstein  
Mrs. James Enders  
Dr. P. Everson  
Jose V. Franco  
G. Allen Fraser  
Edward Glaser

Richard Gluck  
Mrs. R. C. Goodspeed  
Erwin R. Gordon  
Malcolm Greasley  
Stanley Harzfeld  
Lock Shing Hong  
Samuel Jacobs  
Miss M. Jonston  
N. Kashima  
H. Kessler  
Will. Kneitz  
C. Lim  
A. S. Macfarlane  
L. R. Murray  
H. S. Niblack  
P. L. Osmond  
H. Otto

Mrs. C. N. Pattock  
Dr. F. J. Pendleton  
Lemuel Reece  
Cameron B. Reid  
F. L. Rogers  
A. I. Schoff  
R. Scholtz  
K. Shimizu  
H. G. Tienken  
K. Ukota  
Jose Villalobos  
Arthur Weitz  
W. Wentworth  
Miss Jennie Wilton  
W. W. Witt  
J. Woods

## CAMERA CRAFT



SECOND: *M. A. Obremski*

FOURTH: *Mrs. W. F. Eldridge*

THIRD: *Vincent Orlando*

FIFTH: *Jose Villalobos Franco*

### To Mrs. W. F. Eldridge, Apologies

The second award in the May amateur class was printed without credit to the maker. There was no name and address on the back of the print, but no one was to blame. It came about this way: The original print was small and we wrote for an enlargement after the judging, to facilitate reproduction. In due course the larger print came without identifying mark and being again accepted by the jury, went through as anonymous. The original contact picture had complete data on the back. We apologize to Mrs. Eldridge.





### True Amateurism

Geraldine Farrar recently published a sort of autobiography of certain portions of her career and particular determinations born of her past and governing her future which should be read by every middle aged man and woman in every walk of life. She has retired to singing for herself.

Gabrilowitch, the famous pianist and one of the world's great symphony conductors, lead an orchestra of nearly a hundred men, to an audience of many thousands, receiving tremendous applause and a spontaneous approval that went beyond the palpable demonstration. He was dressed in a gray business suit and entered, conducted the orchestra and left the stage with a poise and sincere simplicity of manner that made the usual formality of so big an affair quite intimate, wholly artistic.

Many of the pictorialists whose names appeared on every salon catalog for years now submit pictures but seldom, and some not at all, yet they are making them right along, as good or better than any of those which gained for them popularity. They have stopped pleasing committees, judges, juries and are pleasing themselves.

Farrar has not thrown her heaven-given voice overboard, for, though she is singing primarily for her own pleasure, as and when she chooses, it is to such audiences as enjoy what she is doing, as it is being done.

Gabrilowitch is not disdainful of the conventions. His reverence of art so transcends consideration of self that he should find it difficult to believe an audience could notice his integuments when listening to a Brahms symphony.

The great photographers of yesteryear may be greater than ever, probably are far greater in their present making of pictures for the pictures' sakes. They have not developed an egotism that holds popular opinion in contempt. They merely have merged themselves in their art and externals sluffed off naturally.

These are instances of true amateurism.

How oddly does this cycle complete itself. The amateur, his ambition aroused by exhibitions, strives to satisfy judges, his honors come to him in the degree of his persistence and talents. Presently he has become a famous figure in his class or graduates into the professional. When years of success in the professional field have rendered him affluent or sated, he retires to the amateur again. I say he retires, but it is a retirement to the Valhalla of art.

It is all very natural, very good. Pleasing one's immediate friends is a good start, pleasing critical hanging committees is splendid training. The achieving of a place at the top in national and international salons is very fine. The ultimate is reached when the artist hangs his gaudy laurels on a hook, lights his spiritual pipe and sits down to living his art. He has done his share for men and for himself. Now he shall do it for his art.

Even more broadly applied to life itself, the hurly-burly encountered with endurance, dragons killed with courage, honor achieved, money amassed, and the hey day of existence passed, one may be permitted to call the job done and the hour of refreshment at hand. It is time to live for the pure sake of living, to think and do something for God alone.

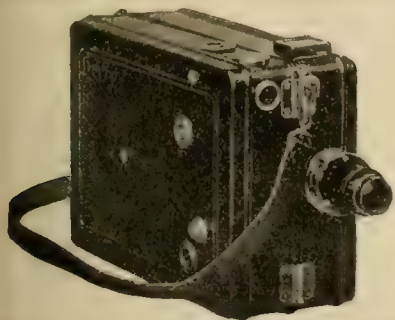


### De Vry Cameras Popular

We were surprised, though we should not have been, to learn that over 125 De Vry Movie cameras had been sold to the Hollywood colony. The information is to



he effect that such artists of the screen as John Barrymore, Marion Davies, Wallace Beery, and others have become De Vry fans and find relaxation from appearing in front of the lens in subjecting their friends and one another to being made in movies. The DeVry projector is so



compact and self-contained an instrument that the comfort with which pictures may be shown has given a decided impulse to the taking of unnumbered hundreds of feet of film.

### Editing

Editing your film often adds the needed touch for complete success. Many amateurs are inclined to overlook this very important matter. They shoot a reel of film and when it is returned from the finishing station they rush it into the projector without a thought to possible improvement through editing.

Naturally some films contain a few feet of pictures that are not up to the standard of the remainder of the reel. There may be portions at the end of each shot where the camera was slightly moved before the lever was released, parts which were panned too fast, close-ups which may have been taken hurriedly and were consequently not correctly exposed.

These slight imperfections do much to offset the beauty of the good pictures in the reel. If the film is run over in the Kodascope Rewind and the obviously imperfect portions are eliminated—in other words, if the film is edited—the projected picture will tell a very different story. There would be an immediate improvement and a corresponding increase in satisfaction and pleasure on the part of all concerned.

Editing is not a difficult task. On the contrary, it adds much to the fun of producing your own movies. A little cutting and splicing here and there will transform just an ordinary reel into a motion picture that you will be proud to show to anyone who may drop in for a bit of screen enjoyment.

—Cine Kodak News.

### Salvaging Light-Struck Film

Occasionally, through carelessness in removing from the camera, a portion of a very desirable scene is light struck at the edges. As the subject matter is usually in the center of the frame, the important part of the picture may not be damaged, but still the bright light at the edge in projecting detracts greatly from the pleas-

## CAMERA CRAFT

ure of viewing the film. Mr. W. E. Kidder, Kalamazoo, Michigan, has found a method of salvaging such film and insuring satisfactory projection. We quote below from his letter:

"First, the picture must be one in which you can narrow the frame to a certain extent without destroying the value of the picture. I arranged a method whereby I could accurately frame the picture on the film, which may be done in a variety of ways. Then I took a little film cement and mixed dry lamp black until I had it thoroughly mixed to the consistency of rather thick paste. This I thinned with ethyl acetate to a good brushing consistency. With this substance I coated the celluloid side of the film evenly to form a very nearly square picture.

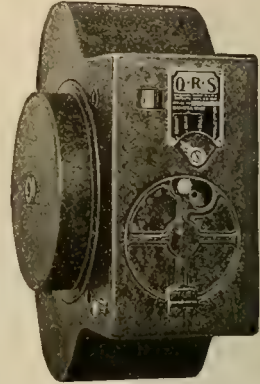
"At the time I was working on it my arrangement permitted me to withdraw the sheet of paper (which I had placed underneath the film and which took up the surplus material) leaving the film itself on a ground glass under which an electric light was burning. Wherever my coating was a bit thin, which I could determine easily, the light being underneath the film, I recoated before moving to the next set of film. The result obtained was really quite astounding, although not perhaps perfect, but good enough not to be noticeable except in the difference in the size of the picture when projected. The lamp black is very opaque, and when evenly distributed in the manner mentioned, shuts off the light almost completely. As soon as this was dry, I found that the cement held the lamp black so perfectly that it was impossible to rub any stain off of it, and I don't believe with ordinary use it will affect the emulsion side which it comes in contact with in winding on the spool.

"If this was daubed on in spots it might have a tendency to scratch it, but laid on smoothly with a camels hair brush it apparently works all right."

[Editor's Note: The success of this work is due largely to the operator's care and the method used. It is up to the individual to decide if he cares to invest the necessary time. We print the above as an account of one amateur's success.]—Filmo Topics.

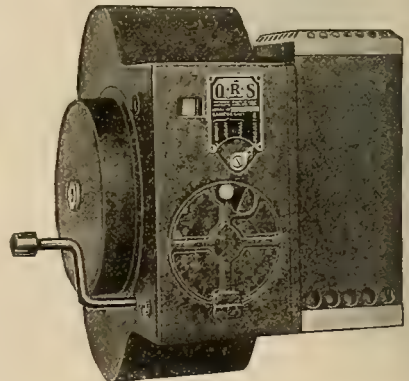
### Q. R. S. Movie Camera

It is needless to dwell upon the position The Q. R. S. Company (formerly known as The Q. R. S. Music Company) has held for the past 25 years or more in the music industry since practically every home an automatic player piano recognizes the exclusive quality in Q. R. S. music rolls.



As Q. R. S. entrenched itself in the confidence of the consumer and dealer in the high standard of quality in its product and in its generous merchandising policies during the long years of establishing itself in the music roll business, it did likewise in the development and successful manufacturing of its radio tubes and Rectifier tubes.

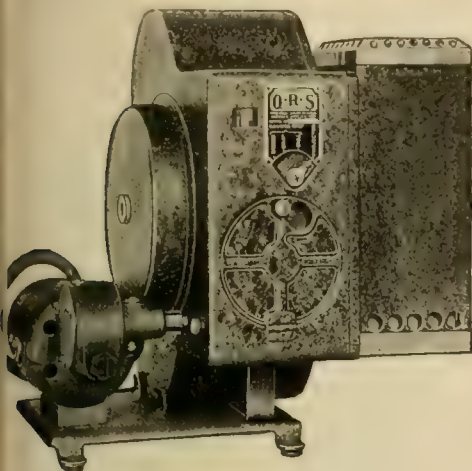
The successful career of The Q. R. S. Company as manufacturers and merchandisers makes possible their decision to broaden their scope to even wider fields. In casting about to find out just what lines demand and in which they could serve would meet with the greatest public





## CAMERA CRAFT

the public best—Q R S investigated the potentialities of the amateur movie camera and projector industry. As a result, after acquiring certain novel features and developments in that line, they proceeded to organize a division for that line.



The product as developed and to be known as the Q R S Movie Camera and Projector has for the better part of one year been undergoing all manner of developments and tests until at the time of this writing the company is tooling up their production, starting on such a volume schedule as will undoubtedly place them advantageously in point of production and sales.

The Q R S Movie Camera and Projector is a combination machine—the Camera and Projector mechanism being one and the same. By attachment of a lamphouse and electric motor the Camera becomes the Projector. Obviously a film run through the same mechanism for projecting as took the picture will naturally produce a more perfect result on the screen than when traveling through separate machines.

### Halldorson Cine Lights

Halldorson Lights for Photographers are well known. That certain units are specially made for amateur cine photographers seems not so generally known. As home movie theatricals and intimate motion picture portraiture become more and more popular the need of artificial lighting evinces itself and it could be well for the reader to acquaint

himself with the Halldorson line. A letter to the Halldorson Company, 4745 North Western Avenue, Chicago, Illinois, will bring literature that is interesting and informative.

### Lens Speed

The technical term "f:1.9," used to designate the newest addition to the line of Kodak Anastigmat motion picture lenses, may mean but little to the maker of home movies. He knows it is a "fast" lens, because he has undoubtedly seen printed reference to that effect. But just how fast it is, is not, in all cases, entirely clear. So let's draw a parallel that will make for a better understanding of what is meant by "fast as applied to anastigmat lenses.

Let's assume that you have a high grade motor car which has a maximum speed of 80 miles per hour on level road. The fact that you have this tremendous speed at your command does not, of course, mean that you will use it or need it at all times. But, when you need it, you have it.

Since your engine will develop that degree of speed, it is a pretty safe assumption that it has plenty of reserve power above an average rate of, say, 35 miles per hour. If you are bowling along the countryside at this 35-mile speed, and come to a steep hill, you don't slow down and creep to the top. You merely "step on the gas"; the reserve power of your engine then comes into play and carries you to the top without appreciably slowing the momentum of your car. Then, when you reach the top and no longer need the reserve power, you cut down the flow of gas.

Cloudy weather and poor light are the "hills" that the cinematographer must surmount. But, instead of pressing the accelerator, you open the diaphragm wider and the greatly increased amount of light that is permitted to reach the film makes the exposure.

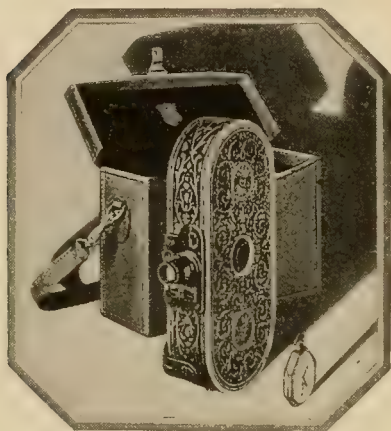
Then, when you have reached the top, and the level road stretches before you—when the sun is shining and the light is good—you merely cut the reserve flow of light by stopping down the diaphragm.

Completing the parallel, f:1.9 means to a lens what 8 cylinders and a 4-to-1 gear ratio mean to your motor car—speed and a wealth of reserve power.

—Cine Kodak News.

## A New Lower-Priced Pocket Movie Camera

The Bell & Howell Company, widely known among amateur movie makers as the manufacturers of Filmo motion picture cameras, projectors and accessories, have now announced a new amateur model known as "Filmo 75" which sells at a price one-third lower than Filmo 70, the original Filmo.



This new model is a beautiful piece of workmanship. Lightness and compactness are features which recommend the new Filmo camera for general field, sport, vacation and outing use. Slim and flat, it may be slipped into a coat pocket between shots. Its weight is only  $3\frac{1}{2}$  pounds and its size is  $1\frac{1}{8}$  inches by 4 inches by  $8\frac{3}{4}$  inches. The spyglass viewfinder, a feature of all B. & H. amateur cameras, is concealed within the frame. The winding key, permanently attached, folds flat against the side of the camera, and has a ratchet device permitting winding like a watch. Only one hand is needed to hold and operate Filmo 75. The starting button is located on the front plate beneath the lens, where the index finger naturally falls when the camera is held to the eye.

The new Filmo is beautifully finished with a filigreed wear-proof metallic covering, available in a choice of three colors—silver birch, ebony black and walnut brown.

Regular equipment includes a sturdy, genuine pebbled leather carrying case with suitcase style handle and shoulder strap, 20 mm. F-3.5 Taylor-Hobson Cooke anastigmat universal focus lens, and a carefully calculated exposure chart.

## Fog

When you load or unload your Cine Kodak, beware of edge and end fog, which is evident when intermittent patches of light appear along the sides or near the end of the projected picture.

Fog is caused by (1) loading the camera in the direct glare of the sun, (2) winding off too much of the leader strip, (3) removing the film from the magazine in direct light, or (4) allowing the film to unroll slightly before the camera is closed.

Fog is liable to ruin valuable film. It can be avoided through the exercise of care during the loading and unloading operations. When loading, never remove both covers of the magazine until you are ready to close the inner door of the camera and proceed with the threading.

When unloading, have the cover in the hand when the camera is opened, and slip it over the roll of exposed film as quickly as possible.

—Cine Kodak News.

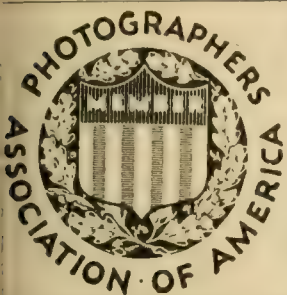
## Photographing the Baby

We have seen many films recently which included baby pictures. While other scenes were generally given the proper exposure, the baby pictures were quite often over-exposed and hence flat, glaring and lacking in detail.

Most baby pictures are close-ups. As a general thing, a close-up calls for opening the lens diaphragm one point. But babies are usually clothed in white and perhaps surrounded with white or light-colored blankets. This calls for cutting exposure down one point, offsetting the modification for close-ups.

Hence normal exposure would be correct for most baby pictures. The excessive white areas, however, cause halation which can best be overcome by a color filter. For getting the best movies of such subjects use a color filter and open the lens diaphragm one or two stops above normal as demanded by the density of the particular filter you use.—Films Topics.

**AND KEEP YOUR  
LENSES CLEAN**



## Association News

JOHN R. SNOW, Mankato, Minnesota, *President*  
 CHAS. AYLETT, Toronto, Canada, *1st Vice-president*  
 D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*  
 GEORGE STAFFORD, Chicago, Illinois, *Treasurer*  
 C. W. HOWSON, Minneapolis, Minn., *Chairman Commercial Section*  
 PAUL TRUE, New York City, *Chairman Manufacturers Bureau*  
 L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*



EARL C. WILLIAMS

*Lincoln, Nebraska, in charge of printing and darkroom work at the Winona School*

### Winona School

Registrations for the Portrait and the Commercial Illustrative Course at Winona are steadily coming in. The Portrait Course this year is limited to one hundred students. Over half this number have registered already. The Commercial Course is limited to forty students.

We have been very fortunate in securing Ernest Brierly of Chicago to handle the studies on composition for the Commercial Course.

Mr. Brierly is a creative commercial artist of the highest type, and efficient in various phases of commercial illustration. He received his art training in Boston, Philadelphia and Worcester, and learned to apply his art commercially in New York City, where for seven years he worked in his own studio as a creative commercial

artist and as art director for a large New York advertising agency.

He now has his own studio in Chicago. His total commercial art experience covers a period of fifteen years.

The National Academy finds Mr. Brierly a very valuable member of its instruction staff.

Earl Williams of Lincoln, Nebraska, will have charge of the printing and darkroom work at the school. Aside from covering all ordinary printing in collaboration with the demonstrators from the different paper manufacturers, Mr. Williams will endeavor to instruct in processes not so well known. His course will also include a showing of various methods of improving the final result from the negative. The cutting to the minimum of the retoucher's work, working from cracked or broken negatives—various toning processes, brochure printing, etc.

With this will also be given a simple and effective method of stock keeping and cost finding.

If you have special problems in printing, he is anxious that you bring them along. His endeavor is to make printing the vital, interesting part of the work of the studio.

Registrations are being received daily for both the Commercial and Portrait departments of the school. All who are planning to attend should get their registrations in at the earliest possible moment. Registrations for nearly half of the one hundred students permitted for the Portrait department have already been received. Registrations and inquiries are daily coming in for the Commercial department.

PHOTOGRAPHS  
*Live Forever*





## Pacific International Photographers' Association

Embracing Alaska, Alberta, Arizona, British Columbia, California, Hawaiian Is., Idaho, Montana, Nevada, Oregon, Utah, Washington.

WILLIAM M. BALL, President; Corvallis, Oregon

### OUR COMING CONVENTION

While in the East President Ball contacted most of the manufacturers and succeeded in interesting them in our forthcoming convention which we are lead to believe is to be in Portland, Oregon, toward the end of the coming August. Our president also lined up some wonderful speakers and demonstrators for the programs. His own enthusiasm was contagious and carried everything before it. Busy men expressed a wish to come West and participate in the entertainment.

All who attended the convention previously held in Portland will remember the whole-hearted hospitality, the unstinted diversions, the comfortable quarters, and for them once more "A Rose in Portland Grows." Should our conjecture be correct we shall foregather from the remotest corners of the vast territory covered by the P. I. P. A. and claim our flower.

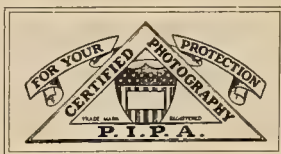
In the meanwhile the Accredited Plan is being discussed in every local and amongst the photographers at large and the movement is gaining in strength day by day. The next issue of our Hi Lites will undoubtedly have much of the greatest interest and news value to impart. It is being eagerly looked for.

This should be impressed on every member: the convention is only a few months off. This is the time to begin planning and preparing to attend. If you intend exhibiting prints pick the most promising negatives now and make experimental prints till you get the one that just suits your own most critical taste. Interest your fellow photographers to do likewise. Begin now to make this the banner convention, the biggest, the best, and then be sure to come and get your share of the pleasure and profit.

Talk up a caravan that shall gather in number as it rolls along, picking up friends and fellow members in the towns it traverses, or organize parties to travel together by boat or rail. The trip coming and going can thus be made a holiday long to be remembered.

---

## Get Behind



## This Sign

---

# HIT CHAT

About our friends.



Ye Editor Retaileth Newes of Ye Profession and in Quaint Italics Titillateth Ye Sphynx with Hys Quill

## An Anne Brigman Exhibition

From May 3rd on the pictorial prints of Anne Brigman were shown at the east and west galleries of the Oakland Art Building, a municipal institution. Mrs. Brigman's work needs no praise. She has achieved a place in photographic art that transcends comment. That her work is not shown more often is due to a reticence on her part and a lack of enterprise on the part of photographic clubs. With all things as they should be this lady should be routed out of any attempt at reticence and brought to universal attention for the betterment of photography and the inculcation of taste into the mass of photographers.

## Commercial Men of Los Angeles

The Commercial Photographers' Association of Los Angeles met at the Masonic Club, 623 South Grand Avenue, for dinner with a very good attendance. Had a pleasant time, after which we went to B. B. Nichols, Inc., 719 South Hope Street, for our regular business meeting.

Our exhibit to Louisville, Kentucky, N. P. A. of America convention, came home with the usual amount of blue ribbons. The exhibit will be shown in various places in Los Angeles.

E. D. Stacy, secretary of Commercial Board of Los Angeles, was our guest through the courtesy of M. L. Bailey. Mr. Stacy gave us a very instructive talk on co-operation, team work and many other things equally vital and constructive. It was an opportunity to hear him. We heartily thank him for his time and thought in our behalf. Our "Old Bill Bailey" does do some mighty fine things for us; someway he is always thinking.

Our member, J. W. Bledsoe, the "old-time photographer," gave an exhibition of

stills and movies of the high Sierra Wednesday, April 25th, 7:30 p. m., at 207 South Broadway, in the Municipal Building of Water and Power. This was very interesting.

President Mott gave a very interesting and constructive talk on "System." He exhibited blanks and explained how to use them. It was decided to elaborate on the system a little and make it of practical use to all members of the association. The blanks could be printed in quantities and each member could take what he required at a quantity price.

Meeting adjourned at 10:45 p. m. All felt that something had been accomplished.

## Hayden Lothers With Salter Brothers

Those who knew and liked Hayden Lothers, erstwhile of Lothers and Young, and have wondered where he is and what he is doing, will be pleased to be informed that he is now connected with the prominent photo-engraving concern of Salter Brothers of San Francisco, and that they may hope to see him in due course and at regular intervals in relation to their needs in that line.

## J. F. Chappell Calls

The quiet and highly efficient gentleman whose astronomical articles are running in our current issues, visited us recently. He and Mrs. Chappell were shopping preparatory to driving to the East coast. It was our first meeting and the man lived up to our anticipation in every way. We hope to see more of him and get more from the wealth of his knowledge on the branch of photography in which he excels.

## The Deacon Studio

The friends of George W. Deacon, and their name is legion, will be pleased to know that the Deacon Studio of Camera Portraiture at 560 Sutter Street, San Fran-

cisco, is being rushed to capacity these days. Babies never were so plentiful, mothers never so desirous of perpetuating their offsprings' pulchritude, and Deacon seems to have settled to a specialty—that of putting the babies into pictures.

*The customer paid a hundred dollars a dozen for the photographs and the photographer kicked because the mounts cost \$2.00.*

#### Death of Holly Todd's Brother

On April 10th Harry Schroeder, beloved brother of Holly Todd passed away suddenly and painlessly. He had been ailing for some time but seemed on the way to betterment when his sudden death came. Jack and Holly Todd were almost prostrated by the shock but we hope they may, in the light of afterthought get con-

solation from the fact that the departed died without suffering and has graduated to a life eternal where there is neither care nor pain.

*Before you yell find out whether your competitor is doing you half the harm you are doing yourself.*

#### Kathleen Dougan

Described she is petite, which means small in Greek, quizzical, hard-working, and wholly delightful. And, she is successful, my, but she is successful. The new studio, in process of construction, is going to be an eye-opener. New in every way and novel and original in conception. We are fond of Katie, but, then so is every body and we all join in wishing her continued success and more of it.



## PHOTOGRAPHIC DIGEST

Edited by H. D'ARCY POWER, M. D., F. R. P. S.

#### Why Must We Continue to Be Bothered With Light Filters?

This question is suggested by the discussion that has been engaging a number of our experts. For the man who, on the same outing, at one time uses a panchromatic and at another a color plate, and at all times likes to see the picture on the ground glass unaltered in color by the presence of a yellow or green filter, the use of plates fully color corrected would be a great boon. I speak feelingly in this matter and find the continual taking of my correcting filter on and off a burden and a nuisance. We have so-called self-screened ortho-chromatic plates on the market, possibly some makes of panchromatic, but we all know that the color correction is only partial and in some brands scarcely to be recognized. Why can not we have full screening by the makers exactly adapted to the particular emulsion? This question, which was started by the "Camera" of Luzern, is answered by no less an authority than Luppo-Cramer that we can, if we will be content to put up with the possible disadvantage that such

a plate might be too slow for snap shots in bad light. Surely this possibility can be discounted by carrying one or two plate-holders with fast plates to meet the emergency. Why should not the Lumiere, Agfa, Lignose and Duplex color plates not so come on the market? The first to make this change will gain a commercial advantage. Many would try a new color plate upon its appearance if they were not put to the trouble and expense of a new correcting filter.

It may be well to note that the well-known expert, Emmermann, states that he can obtain perfect correction by a bath of erythrosine and filter-yellow; but what is wanted is the combined dye emulsion that Luppo-Cramer states is technically possible.

#### Extinction Meters

Light meters are of two classes, one class being those that determine the exposure time on the basis of the rapidity of the change of color effected by the light falling on a piece of sensitive paper, such as the Wynne, Watkins, etc. In this case it is the general light falling on the



meter that is tested, not the amount reflected from the body to be photographed. The other principle is to interpose between the object and the eye an obscurator (if I may coin a term) that will extinguish the details of the image in connection with a graded scale that indicates the exposure time. The first system has the essential defect that the light tested is not that reflected from the object, though related to it; the second, suffers from the fact that the eye takes part in the judgment, and eyes are variable.

The well-known practical worker, Mr. E. A. Bierman, publishes in the *British Journal of Photography* January 13th, an article on this subject that coming out of his large experience can not be overlooked by those in difficult (and especially in commercial work) varied light conditions. The writer deals especially with the case of indoor exposures stating that for outdoor work the chemical types such as the Wynne, Watkins, etc., are perfectly reliable, though unfitted to cope with the other class of cases. From this article I transcribe the following important passages, to which I may add my own agreement:

"I have made it my business to become acquainted with every type of meter I could get hold of, and I have accumulated quite a collection. During my study of the different types of instruments I have endeavored to co-ordinate the various makes of actinometers; but this I have found to be impossible, as they indicate totally different exposures under the same set of conditions. I ventilated this phase of the subject in the "B. J." some years ago."

Thereafter follows an account of his experiences with the various forms of extinction meters as they appeared, with varying results, concerning them in general, he says:

"There are two important things to know when using extinction meters of the visual type. First, with regard to widely varying conditions of light, in very bright light, shadow detail must be completely extinguished; but, in dull light, shadow detail must be distinctly seen. Secondly, interior readings must be multiplied by a factor which varies with different makes of

meters. I have found 24 to be quite correct with the "Icona" for open interiors, and 36 for near subjects. Out-of-doors it is necessary to make allowance for the subject value, since the instrument does not record it.

"The latest meter of the extinction type is the Justophot. This type has advantages over all its predecessors in that it will indicate exposures without any allowance being necessary for the subject value. The only allowance which has to be made is for very bright or very dull light. In very bright light the eyes are apt to be partially blinded, and too much exposure may be given. At the other end of the scale, the eyes having become accustomed to a dull light, under-exposure is likely to follow, owing to the eye seeing too much. In the later patterns of the Justophot Dr. Meyer claims to have compensated for these little discrepancies, but I can not say from my own experience, at this stage, whether he has been successful or not."

Finally he concludes:

"Now, to sum up the advantages of these various types of extinction meters as compared with actinometers—for advantages they do undoubtedly possess. They may be compared with each other as the modern ultra-rapid plate compares with the average plate of thirty years ago. Some of the actinometer users write as if time were of no importance whatever, so long as they can get a correct exposure. Take such a commission as the following, which is not at all imaginary: An operator is sent to a factory where the proprietor requires a dozen or more interior views showing workshops full of busy people, and the work must not be stopped. The job is urgently required and only one day can be allowed for it; some subjects are large shops, some are small ones; some are single machines or operations being carried out in odd corners, some with the light, many against it. What chance does the photographer stand to put up his actinometer and expose to the tint? He usually guesses, and not always correctly. In any case, the time required to get a tint would generally be longer than it takes to do the job and get well on with the next one.

With an extinction meter he can make his test at the instant before exposure, standing beside his camera, and it does not take as long as it takes to write this sentence. All he has to do, if he has a meter of the visual type, is to see in his subject exactly what he knows he must get in his negative—neither more nor less. Even in subjects that are so dark that they have to be helped by a flash, the extinction meter will be helpful, in that it will indicate to what extent the daylight will affect the plate during an exposure of ten or fifteen seconds, to be followed by the flash. The net result is that the operator produces a dozen or more perfectly good negatives from vastly differing subjects, in the minimum of time—and every one is satisfied.

My own architectural work is sufficiently well known around the exhibitions to prove whether my exposures are right or wrong, and they have all been made with an extinction meter of one kind or another, at least during the past twelve years. Take such a subject as an open doorway, looking from a dark interior out to a well-lit exterior view. How would one get an actinometer test for such a subject, where the deepest shadow, over the door, must be exposed for? With an extinction meter of either type it is simplicity itself; one has only to look at the shadow through the meter.

In my pictorial work I never stop down below  $f/11$ , and my exposures run from about ten seconds up to as many minutes, the latter being in crypts, where an actinometer might take hours to tint. In the photographing of fleeting effects of sunlight in cathedrals small stops are impossible, and if one waited for any sort of actinometer tint the subject would probably vanish.

For outdoor work the actinometer is as good an instrument as it has always been; but for indoor work it is bound by very severe limitations, and the extinction meter, when once mastered, becomes the more practicable instrument.

I enclose a few prints of exceptional subjects tested for and exposed by the readings of the Justophot, without further calculation, for the Editor's comments.

E. A. BIERMAN, F. R. P. S.

[The eight prints submitted by Mr. Bierman for our notice were selected subjects of a difficult character, some of them exceedingly so. Four of them were interior subjects, presenting a vista of brightly-lit distance, seen from within a cavern or a dark building, or from beneath a low bridge; one was of the converse type, with a vista of dim interior seen from without the entry to a building; two were of groups within buildings, one a home portrait group taken against the light of a bay window; and the last a sunset scene on a rocky coast, with the sun just above the horizon line of the sea. At least two of the subjects would have been quite beyond the scope of an actinometer, and in all the remaining instances the use of an actinometer, if practicable at all, would have been much less convenient than with the Justophot actually employed. The excellent tone rendering in each example, together with the meter and exposure data quoted, certainly indicates that this instrument is capable of giving very reliable guidance in the most difficult circumstances.—Ed.]

#### Safety Lights for the Darkroom

Anyone who has used green safety lights or the development of panchromatic plates will have realized how much more natural all things appear under this illumination as compared with yellow or red lights. The quality of paper usually employed with panchromatic plates is as a rule too dense in color for use with the development of bromide or chloro-bromide prints, where the employment of such a color would be extremely valuable. Dr. Josef Dainer, in a recent article in the *PHOTOGRAPHISCHE KORRESPONDENZ*, has provided formulae for four depths of tint:

- I. Naphthol green, 1:25 soln. 7. 5 c. c. s.  
Tartrazine, 1:25 soln. 10 c. c. s.  
Gelatine, 8 per cent soln. 52.5 c. c. s.
- II. Naphthol green, 1:25 soln. 5 c. c. s.  
Tartrazine, 1:25 soln. 10 c. c. s.  
Gelatine, 8 per cent soln. 55 c. c. s.
- III. Naphthol orange, 1:50 soln. 10 c. c. s.  
Naphthol green, 1:25 soln. 5 c. c. s.  
Gelatine, 8 per cent soln. 55 c. c. s.
- IV. Naphthol orange, 1:50 soln. 10 c. c. s.  
Naphthol green, 1:25 soln. 2.5 c. c. s.  
Gelatine, 8 per cent soln. 57.5 c. c. s.

SALON WEEK  
IS COMING



EVERY PRINT  
A WINNER



# CLUB NOTES

## Associated Camera Clubs of America

To fill the vacancy in the directorate caused by the death of Mr. W. C. Mackintosh, President Cindrich has appointed Karl A. Baumgaertel, president of the California Camera Club, 45 Polk street, San Francisco, Calif., to fill this position. Mr. Baumgaertel has been active in the affairs of the California Camera Club for quite some time and will make a valuable addition to our Board of Directors.

In view of the keen interest which ex-President L. F. Bucher has always taken in the affairs of the Associated Camera Clubs of America, and in view of his untiring efforts in its behalf and the tremendous amount of work which he has put forth in the past to bring the organization to its present healthy state of existence, President Cindrich has appointed L. F. Bucher an Honorary President of the Associated Camera Clubs of America, which appointment has been unanimously approved by the Board of Directors, and the matter is now submitted to the active member organizations for ratification, for which an affirmative vote of at least three-fourths of the active member organizations voting is required, in accordance with Article 4 of the Constitution of this organization. Let's make it unanimous.

The matter of a Traveling Salon has been one for consideration at various times in the past, and the present administration would like to again make an effort to put such a Salon over. The present idea would be to have a Salon consisting of not over 150 prints which would be entirely the work of Association members, and which would be routed independently of the Print Interchange.

All active member organizations are requested to send their suggestions in regard to such a Salon to the Secretary, addressing their communications to H. G. Cleveland, 1222 Westlake avenue, Lakewood, Ohio, and also indicating their willingness

or intention to participate in such a Salon. Let us hear from all active members promptly in reference to the Traveling Salon and we will endeavor to formulate more definite plans for the immediate future.

## Seventh International Congress

From Monday, July 9th, to Saturday, July 14th, inclusive, there will be held in London, England, the Seventh International Congress of Photography. It is under the auspices of the Royal Photographic Society and past achievements justify our saying it is one more activity of that organization that has done more for the cause of photography than any half dozen other factors.

We have had the honor of being appointed as one of the committee from this country to attend and never greater regret moved us than now at our inability of going, not that we could help so much as that we know we should be helped.

As in the case of previous Congresses, the Seventh will consist of three sections, dealing respectively with:

### 1—Scientific and Technical Questions.

(a) Theoretical Aspects of Photography (including the theories of sensitivity and the latent image, photochemical questions, sensitometry, density measurement, the properties of materials used in photography, etc.).

(b) Photographic Practice (manipulations, apparatus, photographic optics, stereoscopy, telephotography, photographic processes, etc.).

(c) Scientific Applications of Photography (including spectroscopy, radiography, astronomical photography, photographic photometry, photomicrography, natural history and meteorological photography, aerial photography, phototopography, photography applied to ballistics and physical measurements in general, photography applied to chemical and biological investigations, etc.).



(d) Industrial and Other Special Applications of Photography (kinematography, photo-engraving processes, color photography, reproduction of industrial drawings, commercial applications, etc.).

## 2—Pictorial Photography.

3—Bibliography of Photography, Photography in Bibliography, Record Photography, History of Photography, Patents, Copyright, other Legal Questions, etc.

To this great cause every professional and amateur photographer can contribute in the form of a subscription as associate member at 10 shillings, 6 pence, or as full member at 1 guinea (1 pound, 1 shilling).

With amusing British conservatism the application blanks do not give foreign equivalents for the above amounts, but, truly enough each subscriber may find the exchange values at his bank or post office.

If you love photography, if the art has provided you with a living, if the progress of a great industry and the advancement of an important branch of the sciences means much to you, spare the small amounts and become a part of the Annual International Congress.

Address the Honorable Treasurer, Seventh International Congress of Photography, 35 Russell Square, London, W.C. 1, England.

## New Westminster Salon

It is to be hoped that our pictorialists will prove a credit to their nations and affiliations by supporting with even increased enthusiasm this, the eighth annual show of our Canadian fellow photographers. It is by no means a provincial affair, though called Provincial Exhibition. Last year the medals went to seven or eight nations, five of the total fifteen coming to the United States. The closing date is August 18th, which allows of plenty of time for the making of new masterpieces. Get busy, friends, and maintain your big shows with big efforts.

## Scientific Section, R. P. S.

The Royal Photographic Society of Great Britain is holding its seventy-third annual exhibition in September and October of this year. It is hoped that the American representation in the Scientific Section will be such as to demonstrate the place held

by this country in applied photography. I am collecting and forwarding American work for the Scientific Section again this year. Exhibits should consist of prints showing the use of photography for scientific purposes and its application to spectroscopy, astronomy, radiography, biology, etc. Photographs should reach me not later than June 8, and should be mounted but not framed. There are no fees.

## The Cleveland Society, Inc.

Where shall we place, how can we sufficiently praise the erstwhile amateur Cleveland Photographic Club? It has expanded into an organization so expansive that professionals and amateurs have forgotten their classification and are working in harmony for a common end, the betterment of the members, the advancement of photography. The latest is the course of instruction in "Getting the Most Out of Your Camera." Three sessions a week and the motion picture camera also dealt with. Progressive, we should say. What will this fellow Hartman put over next and what cannot a real club achieve when it maintains solidarity and backs its officers?

## Bridge of Allan Exhibition

President Hughes has once more made us proud in his remembrance of "Camera Craft" and self. He mailed us the catalog of the last show and two souvenirs beautifully photogravured of prints accepted and hung. These Scotchmen are staunch friends and it has often impressed us that a warm-hearted Scotchman turns the joke anent the Scotch back upon the joker. But more to the point, Bridge of Allan is maintaining its high place in photography and the exhibitions are growing larger, better, more important, as they recur. Which is an evidence of the fitness of things. Sentimentally speaking, our own heart responds to the echo within it of Allan Waters and the very name conjures up lovely pictures of men, women, and places.

### NOTICE

There being no Salons booked for some months, Coming Events will appear in a future issue.

# NOTES & COMMENTS

## Haloid Expands

The Haloid Company, manufacturing photographic paper at Rochester, N. Y., has recently increased its capitalization from 6000 shares of no par common stock to 5000 shares of 7 per cent cumulative preferred stock of \$100 par value, and 35,000 shares of no par common stock.

The growth and development of this concern during the past ten years has been remarkable. It was incorporated in April, 1906, with a capital of \$75,000 and began its present sensitizing business in a loft of a factory building in the center of the city of Rochester. From this modest beginning and substantially from its earnings the present Haloid organization, manufacturing plant and facilities has developed. Its products are known as quality products wherever photographic papers are used. It has an unbroken and consistent record of profitable operations.

Net sales for 1927, its banner year, were ten times as great as 1912. Net earnings over the last five-year period ending December 31, 1927, have averaged more than \$12 per share on the new preferred stock after all deductions. The business has earned a net profit in every one of its twenty-two years of continuous operation.

Sales volume for the first three months of 1928 is substantially increased over sales for the same period of 1927.

The company is just completing the construction of an enlarged power and refrigerator plant made necessary by the continued expansion of the business. The magnificent up-to-date factory has been built and financed from profits. There are no bank loans and no funded debts. Under the new capital structure the company's balance sheet will show current assets equal to \$60 per share against the new preferred stock with no other liabilities than capital stock and a reserve for 1927 federal income tax.

Present officers are as follows: Gilbert

E. Mosher, president; J. Milnor Walmsley and Edwin C. Yauck, vice presidents; J. C. Wilson, secretary-treasurer.

All the principal executives have been identified with the company substantially since its incorporation and are continuing their active connection with it.

Branches for the distribution of its products are maintained at New York, Chicago, Boston, San Francisco, Los Angeles and Seattle, Washington.

At a meeting of the directors of the company recently the initial dividend of \$1.75 per share was declared on the new issue of preferred stock and 25 cents per share on the 35,000 shares of new common stock, payable July 1 to stockholders of record as of June 10, 1928.

The board of directors includes the following and the officers above named: K. E. Niles and F. W. Zoller.

## A Real College of Photography

The Germans are apt to do a thing with thoroughness. Here we have a letter from the eminent Prof. Dr. Fritz Limmer outlining what the Institute of Scientific and Applied Photography of the Technical College, Darmstadt, Germany, offers its students. The good doctor is quite amateur in his enthusiasm. There is nothing academic in his attitude toward photography or his vocation as head of an important institution. He must be a delight to his students.

As one of the first technical colleges which recognized photography as essential to science, Darmstadt has since 1912 a chair of photography. After many trials the Institute has constantly grown and is today one of the leading institutions in the teaching of photography.

The regular courses given are:

Winter term: Elementary Photography, Photographic Optic and Projection, Theory and Practice of Reproductions Technique, Photographic Laboratory, Photographic Seminar; summer term: Selected Fields of

Photography, Photographic Chemistry, Color Photography, Elementary Moving Picture Photography, Photographic Excursions, Photographic Laboratory.

There are also special courses in Retouching, Bromoil Prints, etc., and the curriculum can be adapted to scientific, technical or professional photography. Since 1926 it has become possible to make photography a major subject for the Diplome-Ingenieur or Doctor of Philosophy.

At present the Institute occupies 14 rooms in the upper floor of the Technical College of Darmstadt.

## **J. Anthony Bill and the Birdie**

The little red bird has once more flown across the continent to voice the information that J. Anthony Bill knows how and knowing how, does it in that way. The wholly charming, original and informative booklet tells us that there is a new studio in the suburbs, this additional to the City Studio. We have learned to esteem the Bill portraits as real works of art, to look for the Bill booklets as exemplars of the finest in printing, to enjoy the Bill sense of humor. It remains for us to enjoy a personal meeting and round off the pleasure of our acquaintance with a session, face to face.

## **Leonard T. Schaefer**

When Q. R. S. ties to a firm as constituting that firm its distributor, it may be accepted that the same is a prominent, worthy concern. Such being the case, Chanslor & Lyon have promptly qualified by putting their new camera division under the management of Leonard T. Schaefer, a man peculiarly equipped to handle the business. Under the aggressive campaigning of the firm and its manager, the Q. R. S. combination motion picture camera and projector bids fair to make a place for itself with promptness.

## **Coffey's Photo Service Moves**

Chet is moving his plant from where he did so well to where he is certain to do still better. For several weeks quarters in the Raleigh Building, Portland, Oregon, were being remodelled and long before this reaches the eye of the reader the Coffey Photo Service will be installed and ready to carry on in this central location pursuing every branch of photography for the discriminating public, as always.

## **The Nixe A Camera**

No guarantee is needed for a Zeiss product other than the makers name and a roll-film camera that may also be used for plates and which has a bellows extension long enough to accommodate the Proxar lenses is something to tempt the hardest boiled prospective buyer. The Nixe "A" is an f 3¼x4¼ instrument equipped with the Zeiss Tessar 4.5 lens, has double extension bellows and sells for \$81. Reading matter pertaining to it may be had on request of Carl Zeiss, Inc., 485 Fifth Avenue, New York, or 728 South Hill Street, Los Angeles, California.

## **Zeiss Products**

New lenses and new cameras appear on the market from time to time and the infinite variety might seem to confuse the public, but through all the Zeiss Tessars and the Ica line of cameras seem to move along with unlesened popularity. There are Tessars of a half dozen makes, some otherwise trade named, but the sophisticated buyer still specifies Zeiss.

The Carl Zeiss, Inc., establishments, 485 Fifth avenue, New York City, and 728 South Hill street, Los Angeles, respectively, have some valuable literature awaiting your request.

## **A Complete Drem Catalog**

We recently received from the Drem Products Corporation, 152 West Forty-second Street, New York City, a copy of their neatly bound and complete catalog of all the photographic novelties and staples made under patents and supervision of Dr. Emil Mayer. It should be known that though Drem is so prominently associated with Bromoil products, there are Drem accessories which should be in the hands of every photographer. The darkroom lamp and the universal joint tripod top are two items that serve as an instance.

## **Kruxo Postcards**

The Kilborn Photo Paper Company of Cedar Rapids, Iowa, offer their popular Kruxo emulsion coated on postcards in two surfaces, semi-matt and glossy, and in three grades of contrast, normal, soft and extra hard. They wish to notify the buying public that prices and samples will be sent on request and feel certain both will please.



## CAMERA CRAFT

### Central Camera Exchange

We have mentioned before how valuable a service the Camera Exchanges offer the public and it occurs to us from recent experiences related by some of our readers to speak of the Central Camera Exchange of 112 South Wabash Avenue, Chicago, Illinois, and one of the leaders in that class. A concern that can boast of an unsullied record of satisfaction to seller, trader and buyer for the number of years that this establishment has carried on, is worth exploiting, worth remembering and worth patronizing.

### Peerless Water Color Contest

Does a hundred dollars look good to you? It is yours for the trying. Just write to the Japanese Water Color Company, Peerless Building, Rochester, N. Y.,

and ask for particulars. All that will be expected of you will be to devise, invent, or otherwise conceive a name for an old established, well-known photographic product. Of course, you will be better equipped to think up a good name when you have used the product itself. If you have never used Peerless Japanese Transparent Water Colors you are a rare exception and should remedy the deficiency immediately, but anyway, write and get in line for that \$100.

### Reelo Motion Film Tank

On account of lateness of receipt we cannot give our readers a detailed description of this remarkable device for daylight development of motion picture films. Full particulars will appear in the July issue.



### Herbert and Huesgen

If every prospective buyer of photographic merchandise could walk into the New York establishment of the above firm, confidence in quality and esthetic delight should come of the experience. A sumptuous building entirely devoted to the best and the best only. As American agents for the well-known Dallmeyer Lens Corporation of Great Britain they have done much to make these splendid objectives available to the demand. Dallmeyer lenses for all the modest exploitation and abstention from loud voiced claims are standards of excellence and efficiency. Send to Herbert & Huesgen for a copy of the Dallmeyer Lens Guide and learn what is being

done to advance photography by advancing lenses.

The highly ornamental group shown herewith represents as many of the force as could be present at the banquet celebrating the twentieth anniversary of the Herbert and Huesgen business. You will note Mr. Huesgen and Mr. Herbert in the middle, the former with a moustache. About them you see a happy lot of men and women who radiate ability and content. Perhaps the greatest achievement of the two men who have shouldered the responsibilities, borne the vicissitudes, and risked the chances of this large concern is in the workers gathered into a real working force and rendered happy in their vocation.



# OUR BOOK SHELVES

## Photography

Alfred Watkins' F. R. P. S., well known book on Photography, Its Principles and Applications comes to us in its third edition, and it's immeasurably better than ever, for the obsolete methods and illustrations, as the author says, have been cut out, and new ones added. The revisions seemed less necessary to the reader than to the critical faculty of the writer himself. All in all this is one of the books we feel it should be hard to do without.

The printing and binding are perfect and it is a welcome sign that publishers like Van Nostrand, Pitman, Dutton, Scribner, Lippincott, and other distinguished firms have seen well to add to the literature of photography.

D. Van Nostrand Company, Inc., New York. 326 pages, bound in stiff board, green book-silk, \$4.00.

## Kodak Research Laboratory Report

The tenth volume of this highly scientific series was printed in May of the present year and has just been released. As usual it carries the banner of photographic learning miles forward. Crabtree, Sheppard, Jones, Lambert, but it is unnecessary to enumerate the distinguished men who devote their lives to research, have made this tenth volume a Golconda of knowledge. To the Eastman concern the world owes a debt which it cannot and will not be expected to repay, for subsidizing a research laboratory which functions from where others stop and which must be an eleemosynary proposition.

## Photographic Publishers

The literature of Photography is large and varied. Readers of Camera Craft should write to the

well known publishers for catalogs of books on the art and science and consult their dealers toward the gathering of a photographic library. Doctors, lawyers, even plumbers have their professional, technical collection of books and it behooves the photographer, amateur as well as professional to at least acquaint himself with what has been written on the subject which constitutes his avocation or vocation.

The Photofreund Buecherei of which there have already appeared nine volumes, is constantly growing in popular favor. The publishers, Guido Hackebell, Inc., Berlin, have therefore issued an illustrated catalogue of the library, containing many illustrations, titles of contents of the different volumes and a few critics from leading magazines.

Not only the excellent workmanship, but also the fine selection of the pictorial material deserve favorable mention. The neat pamphlet gives a good insight into the content of each volume, and also of the other publications edited by F. U. Frerck, such as the very well received "Photofreund Jahrbuch," which annually appears and makes every year new friends; "Lichtbildkunde," which has been enthusiastically received by amateurs all over the world, and last but not least the "Photofreund" itself, which as an instructive and well illustrated magazine for amateurs is constantly gaining in favor.

All those interested in good and scientific literature of the photographic field are requested to write for the catalogue of the Photofreund Buecherei, which will be mailed free of charge when this notice is mentioned.

# International Photographic Association

5593—J. H. Crandall, Motor Route 3, Colorado including mountain views, few lantern slides; Springs, Colo.,  $2\frac{1}{4} \times 3\frac{1}{4}$  up to  $5 \times 7$  mostly views; desires to exchange for pictures of animal life, rodeo pictures and some lantern slides. Class 1.

5594—Harry J. Hemmerle, 1624 W. Glenwood Ave., Philadelphia, Pa.  $2\frac{1}{4} \times 3\frac{1}{4}$  up to  $8 \times 10$  general landscapes and some portraits. Desires to exchange for same. Class 1.

5595—Bernard Kohn, 458 East 15th Street, Brooklyn, N. Y.  $3\frac{1}{4} \times 4\frac{1}{4}$  scenery, animals and action pictures. Desires to exchange for athletic scenes, fire and accident or pictures of famous people. Class 1.

5596—H. Neidig, Willemstraat 12, Bandoeng, Java.  $9 \times 12$  c. m. or enlargements portraits of natives

and landscapes. Desires to exchange for same. Class 1.

5597—Marshall L. Randlett, 63 Pleasant Street, Palmer, Mass. Class 3.

5598—Allen S. W. Sen, University of Amoy, Amoy, China. Class 3.

5599—R. J. Waters, 1976 California Street, San Francisco, California.  $5 \times 7$  landscapes, wild flowers and trees. Desires to exchange for same. Class 1.

## RENEWALS

5446—Frank A. Reynolds, P. O. Box 1009, Fairbanks, Alaska.  $3\frac{1}{4} \times 5\frac{1}{2}$  landscapes, marine views, local views of interest, nature, etc. Desires to exchange for same. Class 1.

SAN FRANCISCO  
PUBLIC LIBRARY

# CAMERA CRAFT



SUMMER SPORT

DR. J. B. PARDOE

SAN FRANCISCO

CALIFORNIA





**Gevaert**



FOR PERFECT PICTURES

# Ortho Commercial Film

(H. & D. 400)

Excellent for field work. A color sensitive emulsion of the same speed as Roll Film.

## Fine Grain ——— Great Latitude

Rich in silver. Enables the photographer to obtain any desired degree of contrast.

Descriptive Catalog on Request—Address Dept. No. 4

**THE GEVAERT COMPANY OF AMERICA, Inc.**

423-439 WEST 55th ST., NEW YORK CITY

CHICAGO, ILL.  
413-421 N. State St.

PORTLAND, ORE.  
345 Salmon St.

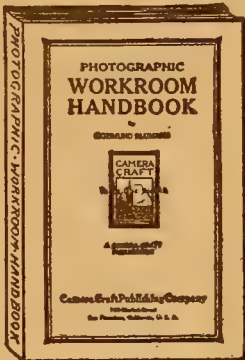
TORONTO, CAN.  
347 Adelaide St., West

*Dealers in Principal Cities of United States*

*The Gevaert Company has been manufacturing photographic products of the highest quality for 34 years—since 1894*

THE BEST TEST

IS A TRIAL



*The Second Edition*

# Photographic Workroom Handbook

By SIGISMUND BLUMANN

Editor of Camera Craft

**IS READY NOW**

The first edition in paper covers is exhausted and in accordance with its fixed policy, Camera Craft shares its profits with its friends by putting the surplus into production without increase of price.

This edition is fully corrected, enlarged by several formulae and

**BOUND IN CLOTH AT THE SAME PRICE**

**ONE DOLLAR**

*At your dealer or from*

**CAMERA CRAFT PUBLISHING COMPANY**

CLAUS SPRECKELS BUILDING

SAN FRANCISCO, CALIFORNIA





MATILIJJA POPPY  
*Charles A. Harris*



# CAMERA CRAFT

*A Photographic Monthly*

».....«  
SIGISMUND BLUMANN, EDITOR

*Claus Spreckels Building, San Francisco, California*

FOUNDED MAY 1900

VOL. XXXV

JULY, 1928

NO. 7

## Flowers and the Camera

By Charles A. Harris

(Illustrated by the Author and Others)



*Mr. Harris is not only an ardent lover of flowers but brings a fine taste and technical proficiency to the treatment of his subject. His correspondence has evinced him to us as a man of many sympathies. He writes delightfully in letters and for publication. To us and to our old readers he will always come as an old friend of this magazine and as such his welcome awaits him.* S. B.

To achieve, to accomplish in some measure is like a dinner served to one's taste—a cause producing a sense of satisfaction. Specifically applied this relates to the camerist; he who is content merely to press the button (often but little accomplished here) or to the one who, like our Japanese friends, not be satisfied with half-way measures, persists until he has caught the elusive but essential spirit of photography that shall fulfil the human desire for self expression. As to this last there are innumerable outlets according to individual inclinations but surely nature photography shall be listed among the favorites. I have observed the outdoor sketching class and notice they begin generally with subjects from nature. But nature photography, as such, has the additional interest of being identified with animate or living subjects. It may, for convenience, be divided into branches; the wild



flowers, the ferns, the trees, the birds, the insects and as the railroad folder has it fur, fins and feathers. It appears that some few have derived pleasure and produced results from practically all available sources but for those of us who cannot make this grade it is to be recommended that one begin by specializing in a particular branch and carry this far enough to be of some interest instead of realizing a job-lot of everything no item of which is comprehensive. Not infrequently we hear of some camera enthusiast who claims to have run completely out of subject matter having photographed everything in sight. Surely not a real photographer, this. Well, here is a modest experience. Considering the time that can be devoted by the average amateur even the familiar subjects such as wild flowers, trees and flowering shrubs are practically inexhaustible and one may look forward with pleasure and anticipation from season to season to new discoveries and farther acquisitions in the way of negatives. When everything else apparently runs dry this fountain seems





perennial. And that not moonshine, either. And further, all this becomes practical because of information gleaned in the process. Interesting and instructive but on the whole, like other things worth while, not always easy of attainment. To get what one wants and as one wants it in the common parlance, seems to demand infinite patience. This is not to discourage but to prepare the novice. The experienced worker knows but does not always divulge the patient care and labor behind his picture.

I do all my flowers at home. Reasonable care when bringing in the blossoms is desirable, but in the end they either revive in water or they do not, which is one of the worries. But leave them in water over night and photograph in the cool of the morning when they are usually at their best. Some, if taken from the water, will begin to wilt and droop before one has finished with them; especially annoying when this takes place while the lens is open. In view of which, after much experiment in making ready,







I have contrived as follows: In the center of a wood base six or eight inches square is fastened securely and firmly an upright little post five or six inches in height. Upon the upper end of this little post is fastened a style of clip similar in shape to the wide film developing clips but for the present purpose a form of clip is necessary that will permit the jaws to open separately so that the flower stems can extend through the clip. Not finding just what was wanted I made one by taking a clip of the clothes pin type and fitting to the ends two cross pieces of wood, these last being four inches in length. This clip, which served the requirements nicely, is attached with jaws facing upward by nailing one of the lower ends to the post the other side, of course, being free





for manipulation of the clip. In use a tall glass or wide-mouth bottle, filled with water, is placed under the jaws of the clip so the stems are immersed in water all the time. The utility of the clip is apparent once work begins. The stems are gripped and held firmly in the position desired and a graceful arrangement of the blossoms is far more easy than by placing them loosely in a bottle or vase. In short, it removes the necessity for cuss words.

Most of our little friends can be handled conveniently in this simple manner and photographed in their natural upright position. There are some varieties, however, that present a problem solved in my case either by taking a chance or by using the vertical method of photography. Single flowers with long and very flexible stems or those with heavy clusters upon flimsy, pulp-like stalks and pedicels cannot always be depended upon to "hold that position." In other words, there is likely to be movement or drooping during exposure when arranged in upright position. This especially with samples not exactly fresh from the field.

Except for certain drawbacks the vertical method would be ideal for all this class of work. The flowers being laid horizontally movement is eliminated and it becomes surprisingly easy to simply lay the blossoms in a satisfactory group. In **this** case they stay put. One method is to suspend a sufficiently large sheet of glass, one 16x20 inches will serve, about fifteen inches above



the floor, the background being laid upon the floor and the camera taking its position pointing downward from a tilting-top tripod or similarly devised support. While otherwise satisfactory, unfortunately it is difficult to avoid reflections in the glass. I have examples where the reflected flower produces an image almost as perfect as the original.

It is obvious, of course, that a blossom, if placed directly under the lens in line with its axis, is not likely to cause any reflections in the glass, but when located some distance from a central position, as usually the case, reflections are possible because the lens sees the object at an angle. White, or light-colored, subjects are inclined to reflect strongly and this becomes a blemish, but dark ones generally reflect so little as to be negligible. However, these objections can be largely modified if care is taken in the arrangement of the flowers and most of the negatives be relied upon to come through all right.

The above method separates the background from the study and produces a pleasing natural photograph. An alternative method is to dispense with the glass and lay the flowers upon black velvet spread upon a horizontal board. The velvet absorbs the shadows which are in evidence with other backgrounds, even black cardboard and the flower when photographed is vividly presented against a black ground. This is very good but some





might not like the contrast. It occurs to me that possibly this might be just the thing if one wished to print in a background from special background negatives. On the other hand, if one likes this shadow effect the way is easy, but for a standard collection the conventional methods are to be preferred.

Considering again the first-described method, let us continue with our little bouquet of hints. It is quite desirable to use a small table to place the flowers upon and a second larger table to carry the background. This last, if placed at the edge, will hang vertically and extend the required distance below the surface of the table in case a large background is wanted. If but one table is used the lens will usually take in a part of the horizontal surface which will reproduce in different tone and look disjointed. The separate table can be easily adjusted for distance and sometimes at an angle to catch the light just right. Occasionally one or more branches project awkwardly and scatter the blossoms in the picture space. By taking a piece of black thread and tying the refractory stem to some other branch the blossoms may be drawn closely together, which, as a rule, presents the best appearance. Also it is frequently possible to improve matters by tying on blossoms or sprays from extra plants when the selected one lacks just a little or to substitute a fine bloom for a poor one. With a little care it is easy to secure a natural effect for, of course, this



faking must not be in evidence. The above refers to branching varieties although I use the thread quite generally to get things in shape. Cover the thread as far as possible with leaves.

The lighting of the subject is, of course, important. How much bad work could be relegated to the limbo if this could be generally realized. Quite frequently certain shades of green in the foliage will not photograph well in the time taken for the blossom even when panchromatic film is used. Consequently it is of some advantage, with average work, to arrange very nearly a front lighting and moderately diffused so that it will get to the foliage and brighter it up. Since the work is usually done at close range, care should be taken that the camera does not shade any part of the subject. The foliage naturally takes a subordinate place but a perfectly black rendering without detail should be avoided. An exception might be advisable with white or very delicately tinted flowers. To secure soft shadows and good texture in a white bloom use a single, rather small source of light, and work at some little distance from this. The result should be a sort of half light as compared with the full lighting mentioned above. Have the light fall obliquely from above the subject and with correct exposure there should be something dainty in the way of prints. If the foliage comes out too dark, stain such parts of the negative with light yellow transparent water color applied with



a fine-pointed brush, taking care with separate leaves not to overrun the margin. I should like to stress this little dodge as superior to any other mode for local intensification. The improvement with some negatives is simply astonishing and the practise has become standard in my case. I use the orange water color and dilute as required. A little experiment will show the exact tint that will produce the best effect. In connection with this matter of lighting some attention might be given the background. With a more or less front lighting there may be a cast shadow upon the background from the subject which should be softened by removing the background to a sufficient distance. Also be certain that the background is uniformly lighted or it may print in different tones from top to bottom or from side to side. An even one always looks best. As to the background itself it will be found that olive green gives a medium dark tone that is pleasing and suitable for this work.

And, finally, there is that matter of exposure. The photography of flowers, as outlined, will not consist exactly of snapshots. On the contrary I find, upon referring to the note book where the record is kept, that the exposures range from thirty seconds without a filter to five and six minutes with the filter. As most of them average around two minutes you will say there is some reason for the flowers drooping during the course of events. But subjects in color require more time than plain whites and grays. And there are guesses coming, too. One of the diffi-



culties when beginning the use of panchromatic film for color work is the lack of data. The information that the speed of panchromatic film is seventy per cent of par speed portrait is of but little benefit because we have never seriously undertaken to photograph deep red or scarlet upon portrait film and have no data. The data must come from experience in using that particular film in connection with color work.

Owing to the comparatively little depth of focus at short range I use stop F 22 as a constant factor. The convenience of invariably using the same stop is also to be found in the matter of records and the ease with which comparisons of exposure can be made. This last should become of considerable value once the work gets started.

And when all is said it is a game fairly worth the candle. There comes an appreciation of the beauty of a common dandelion puff which the photograph interprets and preserves. Prodigal nature scatters them about—treasures that are within the reach of all.

## The Fifteenth Pittsburgh Salon, 1928

By Ralph B. Bonwit

(Illustrated with reproduction of some of the prints hung.)

(Continued from our June Issue)

Alfons Weber, another Chicagoan, also shows a tall building in his "Bird's-eye Perspective," only taken from diametrically the opposite viewpoint of Rittase's "So This is New York," which was taken from the street upward, Weber's being exposed from a high altitude, downward. Albert Schaaf of Cleveland shows a beautiful bromoil, "Armistice Morning, Fifth Avenue," very truly rendered of this wild event. So finely done that it might be an old English print in monochrome. Carl Seehausen of Chicago shows a fine nude in low-key, called "Twilight." This and Rittase's "Persephone" are almost identical in posture and key.

William Mortensen's "Decoration" and "Janet Gaynor" show an entirely original texture that was obviously worked on the negative. The idea is effective and the prints have been given the benefit of his talent. O. C. Reiter has three bromides. His print quality is a byword among pictorialists. In "The Foundation," we wonder what is supporting the boom of the derrick and its heavy load. Victor Overman of Omaha has a figure study in gum called "South Wind" that is certainly one of the jewels of the salon. It classes with Louis Fleckenstein's "Spirit of the Storm," and that is praise enough. Fleckenstein also shows a "South

*Nonna Marianna**Pittsburgh Salon, 1928**Leon De Vos*

Wind" figure and a portrait of Charles Rann Kennedy in his usually impressive style.

"Quiet Afternoon," by R. Ewing Stiffler of Denver, is a "dead ringer" for Blickensderfer's "Union Station," minus the snow. Taken from the very same spot, of the same station, in the same city, the famous "Union Station," by its equally illustrious maker still much more than holds its own against this brunette sister, indeed by a very, very wide margin. T. K. Shindo of Los Angeles has a tastily arranged still life, so named. John Skara, another of the salon's honor men with four prints to his credit, shows "Information," a silhouette in which the high lights run out of

the top of the picture, much to our discomfort. We then pass on to another of his pictures of the iron horse, which seems to be a popular theme of this affair. And why not, for are we not in Pittsburgh, the land of smokestacks? We refer to "The Brute." This makes a fine showing and identifies him as an artist to the core, as do, likewise, "A Summer Day" and "Buddy."

From Czecho-Slovakia came "Alcohol and Nicotine," by J. Sudek, the outstanding genre of the show, a remarkable study in reddish-brown bromide. The smoke coming from the old ne'er-do-well's pipe might have actually been in the negative at the time of development, so natural is it. Otis Williams of Los Angeles shows "Bold Buccaneer." One feels like slicing a good four inches from the left-hand side of the print. This would improve the composition somewhat but not sufficiently to impress the fastidious.

Dr. Amasa Day Chaffee, unfortunately for New York camera circles, is now a resident of Chester, Connecticut. He is represented by "Kaysersberg, Alsace," "Ste. Enimie" and "Carcassonne." They only more firmly establish his right to the title of "Dean of American Bromoilists." One is more magnificent than the other. C. J. Crary of Warren, Pennsylvania, shows "Floating Ice," another pattern in which a bridge, draped in mystery over sunlit waters, is discovered through a lacey tree in silhouette. Johann Helders' "The Bench" is another pattern after the Japanese style which belongs in any salon. Speaking of patterns, we have seen them designed with cigarettes, bathtubs, hairpins, matchsticks, carpet nails, corncobs and now Bruce Metcalf forms one with collars, ordinary white collars, the kind you may purchase in any haberdashery. Indeed, they are nice clean collars, too, but we suspect they will need a thorough laundering after a month's stay in Pittsburgh, for ours turned sooty enough to cause us to make two or three changes daily.

Oh, yes! let's not forget Baltimore's Gordon H. Coster, who presents a nude of his kitchen sink, the lighting so arranged that "The Spigot and the Shadows" makes a real nice thing. But, really when they are as well done as this and Metcalf's "Collars," they certainly deserve their places on the walls. Lewis P. Tabor of Philadelphia offers "On a Laboratory Shelf," a study of that difficult subject, glass, the delicacy and feeling of fragility of which is so truly portrayed as to prove him a technician of no mean ability. Ernest M. Pratt of Hollywood in "Sunshine and Sea" has a nice brown-toned print forming a silhouetted pattern.

Another picture in brown is Leon De Vos's "Ruth," and the subject, we suspect, makes the portrait seem more impressive than it truly is. "The Doryman," by John Allen of Philadelphia,



*Splendid Isolation**Pittsburgh Salon, 1928**J. Bullock*

is a work that stands out as one of the show pieces of the salon. It is compositionally perfect, the shadows being well massed and connected. To return to David and Eleanor Craig for a moment, we must not overlook their achievement, "Precision." The mechanic at the bench is undoubtedly an efficient workman, for not even the disconcerting camera can distract his attention, so absorbed is he in doing his job well. This is a technically fine bromoil.

"Barrymore" is a portrait of the famous Ethel, by Mortimer Offner of New York. So excellent is the likeness that the title is superfluous. "Pulling Out" is another of those numerous railroad subjects in rich brown bromoil. The smoke is dramatically heavy, yet natural. It is one of the three prints of Richard Sidney Smith of Toronto. P. F. Squier has a beauty in "Spanning the Tracks," one of those many picturesque Pittsburgh bridges.

Roy La Rue of Omaha literally ruined a beautiful pattern by too obviously dodging the left side of "Shore Line" into a heavy shadow for no good reason at all. Charles K. Archer has three good bromoils, but all of them lack that strength and individuality for which his works are noted. He has made scores of greater things. Holmes I. Mettee shows four. "Margaret Severn" is a portrait of an obviously clever character actress. The ren-

*Histed**Pittsburgh Salon, 1928**Samuel Lumiere*

dition is fine. Again we have a pattern, this time with a play of light through the hair onto the face. It looks as though pattern making, once thought to be a short-lived fad, has firmly established itself as an essential part of pictorial photography, if the number hung in this salon is an efficient barometer. And William A. Alcock shows "Pittsburgh," a picture we begrudge him. We wish we had made it.

But there are too many more prints worthy of mention to tell of them all, for indeed, this is a showing in which the jurors made few errors. And, by the way, a jury who can make such intelligent selections from some fourteen hundred prints should be acclaimed. Yes, their names are quite familiar to those who follow photography as far as the artistic stage. They are: Nicholas Haz, F. R. P. S., of New York, Holmes I. Mettee of Baltimore, serving his third time at Pittsburgh, and Paul Wierum of Chicago. Is it any wonder that rare judgment was exercised?

# Pictures and Prints

By J. V. Ankeney, M. S., Minnesota



Pictures that are to be used for decoration and atmosphere in a classroom should be of good quality, few in number, appropriate to the surroundings, and suitably framed.\*

Prints and posters that are to be used for a few days only, should be fastened to the display board, or suitably mounted and placed on the reference table. When the class is through with the subject, they should be removed and filed for future use. The classroom is a workshop, not a museum for the display of all sorts of junk or occasionally used materials.

Prints that are of sufficient value to be used again should be mounted on mat board, photo mount, or other suitable backing of uniform size and filed vertically by subjects. Unmounted prints can be filed in the same way in large manila envelopes.

## USE YOUR CAMERA

A good camera is a very necessary part of any teacher's equipment. This is particularly true of teachers of science and agriculture.

A camera can be made to pay good dividends in the form of pictorial records of supervised class and individual projects, field trips, and the like. These pictures may be used in the form of prints for individual or class reference and study, for illustrating booklets, bulletins, and books. Newspaper stories and articles for the school paper or annual yearbook are much more likely to be read when well selected pictures are made a part of them. It is, perhaps, not out of place to call attention to the fact that pictures may serve one or all of the following purposes in a book or booklet:

1—They may be decorative in effect, relieving the monotony of the printed page.

2—They may supplement the word expression.

3—They may take the place of word expression.

Pictures may be enlarged or made into lantern slides or film strip for projection. Albums of prints or collections of slides have many recreational possibilities.

\*Goldstein & Goldstein, "Art in Everyday Life," MacMillan Company.



The student who would use the camera as a tool and photography as a medium of expression is confronted with the following problems:

- 1.—What camera shall I buy?
- 2.—What things are worth photographing?
- 3.—How shall I arrange the things to be photographed so that they will “tell a story” in the most pleasing manner?
- 4.—What exposure shall I give?

### WHAT CAMERA SHALL I BUY?

This is a question that is difficult to answer in general terms. It is largely a question of for what purpose it is to be used, how seriously you plan to take photography and what you can afford to pay. Prices range from a dollar to several hundred and sizes from about that of a postage stamp to 8x12 inches or larger. The beginner should remember that to have a high priced camera does not necessarily mean fine pictures.

For school work the  $3\frac{1}{4} \times 4\frac{1}{4}$  size, equipped to use roll film or cut films and plates will be found very satisfactory. A plate back with gummed glass is recommended in order that the beginner may be able to see the picture and arrange its composition. A tripod is a necessity for this work. Good ones made of aluminum or brass, to fold or telescope, are available at prices ranging from \$4.00 to \$7.00. The lens is the most important part of the camera. An anastigmat lens working at F 7.7 will meet most needs. If there is need for making rapid exposures in dark, cloudy situations the F 6.3 or faster lens should be purchased. Generally the F 6.3 is plenty fast enough. A well constructed  $3\frac{1}{4} \times 4\frac{1}{4}$  folding camera with combination back and F 6.3 lens will cost from \$30.00 up.

“What camera shall I buy?” makes an excellent topic for a series of club meetings. The references below will assist. Don’t fail to interview the local photographer, advanced amateurs, and local camera dealers.

### WHAT CONSTITUTES A GOOD PICTURE?

A good photograph tells a story. It talks for itself. It is not **just a picture**. When you see it you say “My! What a fine bunch of pigs,” “Isn’t that a real farm boy,” “It makes me feel that I am right there,” not simply, “That is a good picture.” A good picture makes you feel as the photographer felt when he made the picture. Strive to get scenes that TELL A STORY, scenes that have feeling in them, scenes that have action in them. Incidents on field trips and excursions, visits to projects, visits to farms. **Suggest action when possible**. This gives life to the picture.

## HOW ARRANGE?

The matter of pictorial composition is one that is difficult to treat in words. Unless there is good composition in a picture, it is nothing more than a photographic record. Good composition, plus good photographic technique means artistic, interesting photographs that live.

## UNITY

A good photograph like a good composition in English has unity. Unity means that there is one main theme, one point of maximum interest around which the remainder of the picture is made to center and to which they all contribute. The painter has one great advantage over the photographer, when an object is in sight that does not pleasingly combine with the picture he can **change its location**, subordinate it in size, or ignore it entirely. A very skillful photographer learns to use his camera, lenses, films, and paper so as to approximate what the artist does with brush and color. When he arrives at this stage he realizes that real photography is more than **press the button and let the druggist do the rest**, it is in reality an art with unending possibilities for using wits and skill.

The center of interest should probably never be in the exact mathematical center of the picture. A common error of the beginner is to place the object of chief interest in the exact center of the picture. A very common mistake in photographing a boy or cow is to get the object close up to the side of a barn wall, or fence and in the center of the field both vertically and horizontally, then with the subject standing rigid and staring at the camera, "snap" it. In this case the background is usually not nearly so attractive as would be the distant pasture, hills, or a clump of trees. Furthermore, the horizontal lines of the fence or weatherboards tend to carry the eye out of the picture. Strive to arrange the lines of the picture that the eye will enter it easily, be led to its point of chief interest, held there for a time, and then carried back into the picture as a whole again.

## PERSPECTIVE

Perspective or depth is very essential in pictures, if they are to appear real and live. We learn to tell distance in the world about us in several different ways. If an object is close to us the eyes are rotated closer together. If it is far away the eyes move apart. We have learned to associate the pressure set up in doing this together with the pressures set up in focusing the lenses of the eye as distance far and near. Then too, each eye forms a different image of the object. This phenomenon known as retinal

disparity gives rise to binocular vision. These are called **primary** cues to perspective.

The **secondary** cues are as follows: Objects, near at hand appear larger than those at a distance. Those near at hand are usually superimposed on those at greater distance. Those close up are more distinct than those far away. The location of shadows gives roundness or perspective to objects. For this reason it is well to have the strongest light coming from one side or back and above rather than directly toward the object. If the sun shines into or on the camera lens shade it with the hand, dark slide or body. In photographing a house so place the camera that more than one side shows. This gives perspective.

A good example of lack of unity so far as arrangement of objects is concerned is illustrated in the following example of a boy with a sow and her litter. The boy stands to one side looking at the camera, the sow is in the middle of the picture and the pigs are wandering in the opposite direction. A better arrangement would be to have the sow lying down and the pigs gathered round for "lunch," with boy standing with back or side to the camera, bending forward, and looking at the sow and litter, with a fine hog-pasture and shade tree as background.

It is evident from the foregoing statements that the photographer can control the secondary cues to perspective in his composition. The student of photography will find great value in studying the arrangement of objects, the lighting, and atmosphere in good compositions in relation to their effect on depth or perspective in the picture.

## BALANCE

A third factor in successful composition is balance. Take, for example, a  $3\frac{1}{4} \times 5\frac{1}{2}$  inch picture. Suppose that a hog is placed one inch from the right end with nothing on the remainder of the print. We say it is out of balance. If we move the hog to the center of the print it is in balance, but it is so matter of fact that it is uninteresting. If we place the path at the lower right hand side to lead the eye into the picture, the boy looking at the sow and litter a trifle up and toward the left, and show the hog house and pasture and distant mountains toward the left we have balanced the picture. The eye enters the picture at the right and passes through it easily and with satisfaction and leaves it interested to return for a second look by the same route.

Strive to have animals or objects in pleasing natural setting and strive to have them look like they did not know the photographer was within a hundred miles.



## WHAT EXPOSURE?

The most important factor in getting a good photographic record is the exposure. Most amateurs underexpose rather than over expose their plates or films. A good exposure table will help the beginner in determining the exposure needed. Where the picture is focused on the ground glass one can learn to judge the exposure by the appearance of the image. If the beginner wishes to make the maximum progress he must make accurate records of each exposure made, compare results, and profit by the experience thus gained.

## PHOTOGRAPHY A UNIVERSAL LANGUAGE

## Why Teach Photography?

The present wide-spread interest in visual education is directly traceable to the remarkable developments that have been made in photography in the last thirty years. These developments have made possible **motion pictures**, **beautiful lantern slides**, and **photo engravings**, including the various color print processes. The photographic processes have been so simplified as to make amateur photography practically universal. Sooner or later nearly every American boy and girl has some sort of camera. There is a certain fascination about taking pictures of our friends, our picnic parties and hikes, the baby, and our pets just as they happen to be at the moment, and of being able to use them in the form of slides, prints, or motion pictures in weeks and days or even years to come as aids to call up the happy experiences therewith connected that are satisfying to both old and young.

AVOCATIONAL, RECREATIONAL AND ESTHETIC  
VALUES

The camera takes the boy and girl into the great outdoors into close companionship with nature, her mysteries and marvelous beauty. It may well serve as a means to training in closer and more careful observation of objects—details of line, form, color, and perspective.

## ANOTHER TOOL AND MEDIUM FOR EXPRESSION

The camera and photography has given boys and girls as well as adults a new tool and medium for recording experiences and for self expression. At present boys and girls receive training in oral and written language expression and interpretation. They are also given an opportunity to learn to appreciate art and music expression and to express themselves if they will in and through music and art. Since photography is so universal in its use and offers such varied applications, training in pictorial expression

and interpretation through photography is becoming a very necessary part of our general education.

#### GUIDANCE VALUES THROUGH PARTICIPATION

The foregoing paragraph would suggest that amateur photography might prove the stepping stone to art and its pleasant companionships. Dean Henry Turner Bailey in his excellent book "Photography a Fine Art" has this to say: "Photography has led thousands upon thousands of people into the magic world of pictorial art, where the masters of painting freely offer radiant companionship and perennial joy to the open-minded lover of beauty." Again the amateur photographer soon finds that this field of **light painting** or **photography** which he has entered involves possible problems of both physics and chemistry. This chemistry of photography and physics of photography may act as a motivation for wider study in chemistry and physics. In truth, photographic chemistry and photographic physics are very worth while fields in themselves.

#### PHOTOGRAPHY AS A VOCATION

The preceding paragraphs hint at the vocational values and possibilities of photography. The botanist, the biologist, the chemist, the physicist, the astronomer, the educator, the doctor, in fact men in all lines of scientific investigation make use of photography in one form or other. Universities, colleges, hospitals, industrial plants have their photographic departments. Newspaper photographers make pictures for news and photo-gravure sections. Special photographers make pictures for magazines and advertisements. Commercial and Portrait Photography offer many opportunities. Photo engraving, Roentgenology or X-ray photography, and motion picture photography each suggest great possibilities for the future.

In view of the fact that our schools are giving more and more attention to the individual and to individual interests, and are giving increased attention to providing vocational information and participation, with a view to providing a basis for intelligent vocational choice, and since photography has high avocational and recreational values, offers possible contacts with art, physics, and chemistry, and has hundreds of vocational opportunities, it appears that use should be made of it in our public school activities.

#### WORTHY OF THOUGHT

*The preceding article, read in conjunction with the series of photo-scientific text appearing in CAMERA CRAFT, should make this magazine a veritable text-book and reference for the teacher and student. We are told that this status has been achieved without sacrifice of our general interest and identity as a magazine. Our writers do not think with their memories or mistake reprint for originality. We seek fresh, active minds and select with discrimination.*



TO A GULL FLYING SEAWARD

By PHILIP SHERIDAN HALEY

*High have you flown to where the sleeping  
night*

*Throws purple shadows round the western  
light;*

*The watery kingdom where the God of shade  
Drowns in hazy mantles, sea mist made.*

*Do you then, see beyond the lee,  
A sea wet hand which beckons thee?  
Or do you fly to merge your cry  
With waters winging 'neath the sky?*

*Oft' have I seemed to feel, in day born dream,  
A happiness more far than southron isle.  
Does in your wild breast then, there glow  
this gleam,  
That leadeth you to dare the sea the while?*

*Cosmic the lee, cosmic the tide!  
Cosmic the soul of you abide!  
The Swan of Brahm, the primal bird,  
Calls unto you and you have heard.*

*Primal vibration thundering at your heart,  
Wing-swift, from lofty ledge I watched you  
start,  
Seeking your God in chaos, pilgrim free,  
A restless wingling of a vagrant sea.*



# Camera Work of Moving Pictures For the Amateur and Professional

By Ernest M. Reynolds

Illustrated by the Author

(Continued from our June Issue)

## PHOTOGRAPHIC NEWS EVENTS

When first arriving upon the scene of interest find out thoroughly what has happened or what is going to happen. It is safe to say that in 90 per cent of news stories the next thing to do is to get to some point of vantage and photograph a panoram view of the scene in general. Be careful not to use more than twenty feet of film on such a scene. Then get the "meat" of the story, which is generally a scene showing a closer view of what really is happening. Finally end up by making a couple of close-ups of the principal characters in the affair. Extreme care should be used to hold down the total footage as much as possible. If you can keep your story within a hundred feet of film you are just as well off as though using twice that amount. Of course there is always the exception to the rule which really requires much more film, and when this kind of an item turns up, pitch in and make plenty of film. Run the risk of the news weekly using a good portion of it. News weeklies in general use about seventy-five feet of film to the story; special subjects running as high as 300 feet. After making your news story, carefully pack the undeveloped negative in a tin box such as it came in, and then put this tin can in a wooden box and send immediately to any one of the widely known news weeklies. The price is about one dollar per foot for accepted negative. All film which is not used will be returned immediately. People who demonstrate their ability to do good work, occasionally make permanent arrangements with news companies, as their staff photographer is often many miles away from an important event. A written statement should always be mailed along with the film, but under separate cover. In this letter tell plainly and in as few words as you can, just what you photographed and if possible a clipping from a local newspaper.

Another very important thing to do when making news pictures on a free lance basis, is to ascertain if possible if there are any other cameramen making the same subject. If so, whom they represent, and in this way you may obviate sending news film to a weekly who already has received film from another source. In packing film for shipment either by mail or express, be sure the wooden box is labeled with a yellow "caution" sticker, required by law.

## GENERAL HINTS FOR THE AMATEUR CAMERAMAN

It is quite natural that the aspiring cameraman will look for new fields to conquer after he has gained confidence in himself with a camera. This confidence can only come after many efforts and a few good pictures. Records of the baby's first steps or dad with his pipe and paper, mother welcoming the young folks and the like—these are all wonderful pictures to keep and almost without fail, they will be among the amateur's first efforts. Of course there is always the possibility of being able to make a news picture, but sometimes the news is slow in happening. To the photographer who wishes to forge ahead and attempt some of the finer details of cinematography, the field will be found most interesting. Little or nothing has been mentioned heretofore about the finishing of the amateur moving picture film, as very few attempt to do this work themselves. It is advisable to let some reputable laboratory handle the finishing whenever possible. However, there are always a few who know

the technical side of still photography and wish to attempt the developing and printing of their own work. For these indulgent workers tables and formulas will be found further on.

The photographing of pictures indoors is somewhat more complicated than those of the exterior variety. It is quite unusual to find an interior with sufficient natural light to permit the making of moving pictures. The interior which is most like out of door light is probably found in a greenhouse. Beautiful pictures can be made in such places as long as the day outside is moderately bright. A large room with white walls, sunlight outside and placing subjects near the window will generally produce good results. When light is a scarce commodity, large white sheets hung just out of range of the camera and so placed as to reflect all the outside light back upon the subjects, will be found very helpful.

The making of trick pictures is a very large subject, and growing larger every day. Successful trick work depends to a great extent upon the precision of the camera and the skill of the cameraman. Amateur camera equipment is usually not very practical for the making of trickery as displayed upon the screens today. However, there are a few stunts which will keep the average theater patron guessing, which the novice can produce quite easily.

One of the simplest yet very ludicrous effects is that of reverse motion. People running backwards, and street cars and automobiles all moving in the reverse order of procedure, never fail to bring a laugh. This effect is obtained by turning the camera crank backwards, instead of the film being pulled down, through the gate, it is shoved upward. Inasmuch as some amateur cameras are not constructed to accommodate the reverse motion, the next best thing is to turn the camera upside down. This will bring the crank on the left side and truly quite unnatural. In turning the crank to follow the same relation to mechanism, it will now be cranking backwards. A little experimenting and thought upon this matter will divulge some interesting stunts. Of course this idea of turning the camera bottom side up for reverse motion is only necessary when said camera is not already equipped with mechanism for such action. If, however, the camera has the take-up attachment for the upper magazine, all that is needed is to cover the lens, wind off whatever footage is thought necessary, uncover lens and turn crank backwards. If considerable amount of this work is to be made, the best way is to load the lower magazine with the unexposed film and thread up to the upper magazine.

Another interesting trick and probably the one used mostly in scientific work is that which is known as "stop motion." This is produced by the use of a trick crank, that is, the crank which is geared down to where each revolution will make but one frame or picture. It can readily be seen that as much time as wished can be made between the exposures. The trick crank may be turned at the same rate of speed, two turns a second, as the regular crank of camera. This will result in two pictures per second instead of sixteen, which is normal. Therefore, a greater amount of action is covered in a short length of film and when projected, the subjects which were actually in normal motion will fly around like mad. Likewise, very slow action may be sped up to a very interesting degree. The growing and blooming of plants and flowers when photographed in this manner appear to rise from the ground, unfold their petals to a stage of maturity all in a few seconds of time. The making of such a picture as this is not at all difficult and presents a most marvelous appearance on the screen. Uniform lighting is, of course, imperative. The camera must be set in one position and left exactly in the same place throughout the entire picture. A few turns of the crank every hour will give the desired effect in a majority of cases.

The use of this trick crank is the extreme in one direction, while the "slow motion" effect is the extreme in the opposite direction. This will be

explained here, but is one of the few stunts quite impractical for the amateur to attempt. This slow motion illusion is produced by running the film through the camera very fast. The speed which seems to produce the most satisfactory slow motion effect is eight times faster than normal. In other words, for every foot of film run through the camera at normal speed, eight feet must be run through to produce slow motion. When projected at normal rate, it will be seen that it takes eight times as long to go through a certain motion as it would if it were photographed normally. A number of complications enter in this type of work, and it is urgently advised that the amateur abstain from this branch of photography, at least until he is quite adept at other phases of the work.





The double exposure bit of action here illustrated might well be called "Putting Life Into the Picture," for in reality that is what is done. Exposure No. 1 shows a set-up of the picture frame, with a dull black piece of cardboard placed in the frame instead of the usual portrait.

A rather difficult part of this double work is to know just where the limits are within the frame. A practical way is to cut a mask to just the right shape which will allow an opening large enough to come within the picture frame. Then mark the position of this mask in mask-holder and remove. After this, photograph the set-up as illustrated in No. 1. If it is understood that you wish a 20-foot bit of action, turn off that amount of film through the camera, thus making the first exposure.

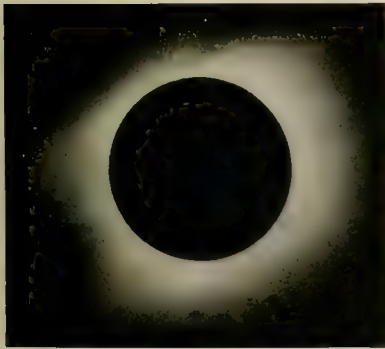
Then with lens covered, rewind the film to the starting point of No. 1. Adjust the mask in position to keep within the picture frame, then it must be securely fastened so as not to move in any way. Now frame up the girl so as to come within the limits of the mask. In this second exposure you are photographing nothing but the girl. Better rehearse the action carefully as it is a case of make or break the picture in this next exposure. When you are sure everything is ready and mask in place, turn off the same number of feet of film as in the first exposure. If everything has been well lined up, the result will be as illustrated.

## Astronomical Photography

By J. F. Chappell

Lick Observatory, Mount Hamilton

(Continued from our June Issue)



Total Eclipse of Sun, Australia, September 21, 1922. Exposure 32 seconds with 40-foot camera.

It is astonishing to find that such a form as the nebula called the *North America*, is invisibly existent in our northern sky, and that night after night of our lives we look toward it without perception. It is visible only to the chemical retina. The camera pierces the sky and records the invisible marvels. Herschel caught hints of this nebula, but it showed first fully on a plate taken December, 1890, by Max Wolf.<sup>13</sup>

All this variety of work must be done away from the smoke of cities, and fog of lowlands. *Good seeing* is a requisite, and the location must give a high proportion of nights free from moisture. This accounts for the odd location of many observatories. Vegetation must be guarded near them to prevent air currents that result from heating of the soil. Alfalfa was planted around one southern observatory to absorb radiations and improve daytime solar work.

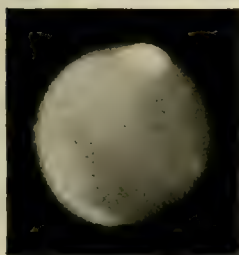
Temporary stations for celestial photography are often set up, particularly for eclipse observations. These are usually arranged well before

the predicted day of the eclipse to allow time for practicing the changing of plates, and exposure motions necessary in those few precious moments when the sun actually becomes darkened. Artificial eclipse conditions have been attempted but without success, a real eclipse of the sun is attended by phenomena we need to study and can observe at no other time, and therefore fortunes are spent traveling to remote corners of the earth to procure the precious eclipse plates.

Professor Pickering says that problems of distribution of the stars can now scarcely be undertaken in any other way than by photography. Even those strange absorptive patches of blackness that are seen in the sky show best on photographs. The astronomical branch that has seemed most divorced from photography has been the measures of double stars; therefore it is most interesting to quote the words of Dr. R. G. Aitken, Acting Director of Lick Observatory, who has made the observation and study of double stars his specialty. In his own words:<sup>14</sup> "Photographic processes of measurement are coming more and more into favor in almost all lines of astronomical work and with the constant improvements that are being made in the sensitiveness and fineness of grain in the plates it is probable that important work in double star measurement will soon be undertaken photographically. Indeed, experiments in this line date back to 1857, when G. P. Bond secured, with an eight-second exposure on a collodion plate, the first measurable images of a double star, *Zeta Ursae Majoris*, angular separation  $14''.2$ . Pickering and Gould in America, MM. Henry in France, and the Greenwich observers in England, among others, followed up this early attempt and succeeded in securing results of value for some stars as close as  $1''$ . More recently Thiele, Lau, and Hertzsprung at Copenhagen have carried out more extensive programs and have investigated several sources of systematic error in the measurement of photographic plates. Hertzsprung is at present continuing his researches at Potsdam, and finds it possible to secure excellent measures of pairs as close as  $1''$ ."

Dr. Aitken goes on to define the scope of photography in this field:

"There are obvious limitations to the application of photography to double star measurement; very close pairs and pairs with moderate distance in which one component is relatively faint will not give measurable images on plates at present available. On the other hand there is no question but that wider pairs can be as accurately and far more conveniently measured photographically than visually, provided systematic errors are eliminated. The discovery of faint double stars with distances exceeding say  $3''$ , may also with advantage be left to the photographic observer. Comparison under the blink microscope of plates taken at suitable intervals with instruments giving fields on the scale of the *Carte du ciel* charts will quickly reveal any such pairs which show appreciable motion and these are the only faint pairs that need be taken into serious account in the present stage of double star astronomy. Instruments



1. *San Jose, 13½ miles distant, under violet light conditions.*
2. *Same photographed with infra-red light.*
3. *Mars by violet light.*
4. *Same by infra-red light.*



giving photographs of large scale will, of course, reveal closer pairs. Thus, Fox, on plates exposed with the eighteen and one-half inch Dearborn refractor, has recently found two pairs (Fox 11 and Fox 25) with measured distances of 1.7" and 1.2", the magnitudes being 9.9—11.9 and 9.6—10.2 respectively."

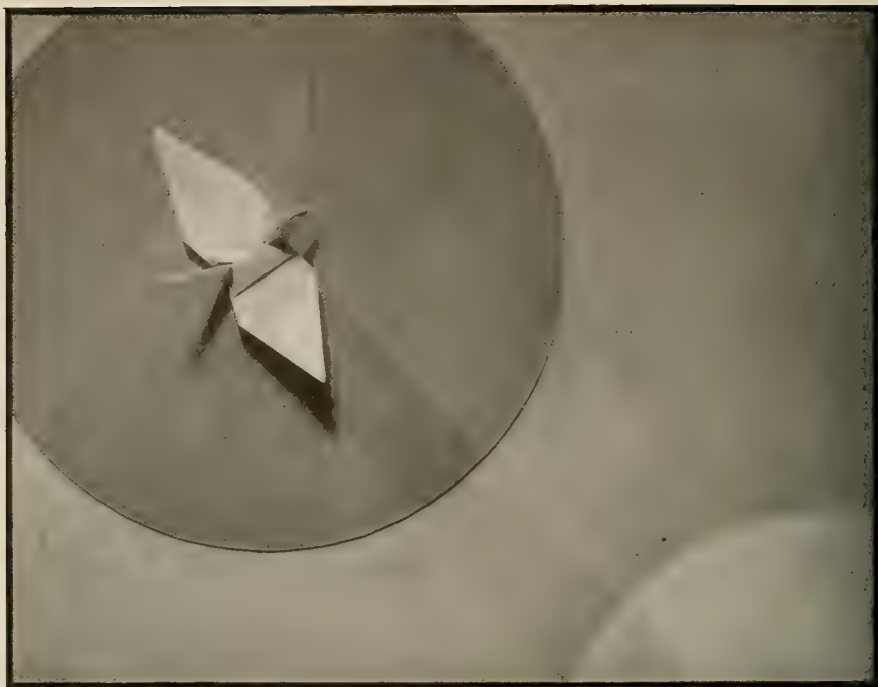
All this makes a strong case for photography. Even stellar parallax, "that<sub>16</sub> subtlest problem of stellar astronomy" has been solved with the camera. But it is only fair perhaps to point out any weak points, the slight offset to photographic usefulness. There are perhaps only three such: first, there is the aesthetic element. Anyone with an eye to drama and poetry would rather imagine a hero-astronomer discovering a star or moon under the vault of nocturnal blue than to visualize him at a desk littered with instruments. The old fashioned notion still claims the fancy, and such figures as Galileo and Herschel will maintain a glamour difficult for a modern to achieve.

Second, in planet surface study, details, such as the *Mars* canals, seem to elude the camera. Russell<sub>16</sub> says photography is increasing in value, but he holds it cannot compete with visual observation in the study of finest details of planet surfaces. Third, in work on red stars, photography falls down a little. Red stars come out five or six times fainter on sensitive plates<sub>17</sub> than they appear to the eye, and there is much attendant difficulty in red star photography.

(To be continued)



## CAMERA CRAFT



FIRST AWARD PRINT

*H. Kira*

### ADVANCED PICTORIAL CLASS

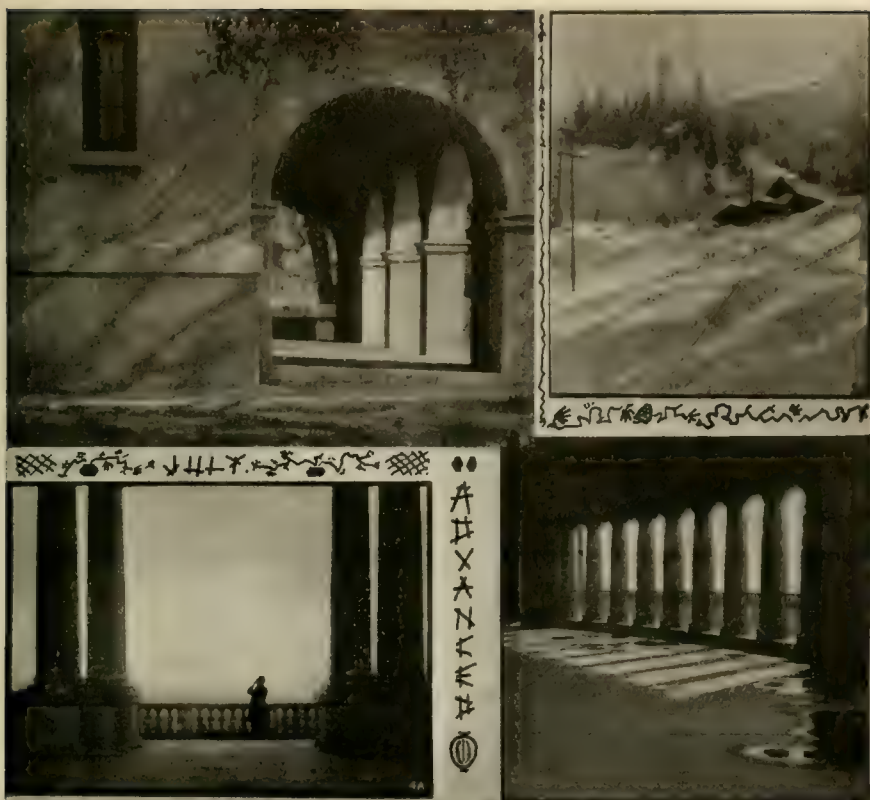
#### JULY 1928 COMPETITION

##### Advanced Pictorial

Ernest Aftgut  
G. Bertelli  
Miss S. Bonn  
Mrs. Inman Collopy  
Dr. Albert Creitz  
Henry Dittmyer  
Miss Helen Duane  
Andre Dufour  
P. Eigemann

Tomihisi Furuya  
Michael Graney  
Adolph Gutman  
Dr. Franz Hattemor  
Rudolph Hiller  
Dr. M. Jepson  
Hiroma Kira  
M. A. Obremski  
Dr. Matthias Oltman

Fr. Pfennigbauer  
O. Remsen  
F. Lee Rogers  
Dr. Max Thorek  
Henry Ullman  
W. A. Van Dyke  
Herb Volcker  
Otton von Zellar

SECOND: *Tomahisa Furuya*FOURTH: *Fr. Pfennigbauer*THIRD: *Miss Alma R. Lavenson*FIFTH: *M. A. Obremski*

## ADVANCED PICTORIAL CLASS

## A Correction and an Apology

In the May issue the pictures receiving first award in the two classes were inadvertently reversed as to place. Mr. W. A. Watson made the print that appeared over Mr. Horace Tyzack's name, and Mr. Hyzack made the one credited to Mr. Watson. In other words, the first award, Amateur, should have been credited to Mr. Tyzack and placed in the Advanced class and so the picture placed as first in the Advanced should have appeared as in the Amateur class and credited to Mr. W. A. Watson.

## CAMERA CRAFT



FIRST AWARD

*Edward Alenius*

### AMATEUR CLASS

## JULY 1928 COMPETITION

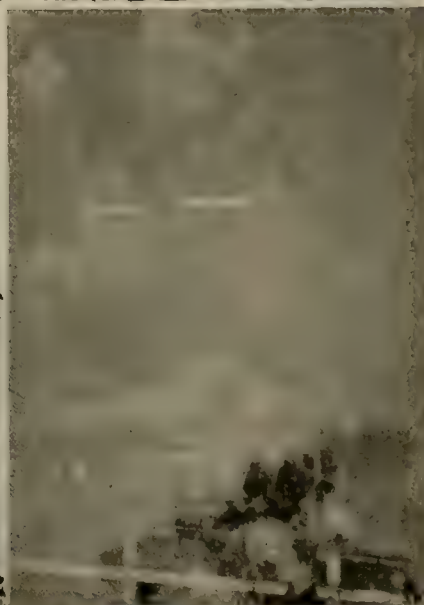
### Amateur Pictorial

E. Alenius  
O. Andresen  
Peter Asmund  
Ashton M. Atwood  
Howard Atwood  
O. Bickerdike  
Alexander Blackie  
Dr. C. E. Bousefield  
Gerhard Burde  
Harry Carey  
C. K. Carr  
Miss Phillipa Charlton  
M. K. Curtis  
Mrs. W. F. Eldridge  
Mrs. S. P. Fream  
Edward Glazer

Frederick Goerner  
Oliver Gruen  
Miss Hazel Hite  
Mrs. Louise Hommet  
Miss Josephine Isman  
J. Kaikow  
I. Katishi  
Miss Thelma Lafferty  
Dr. George B. Lake  
C. E. Lamphere  
Miss Alma R. Lavenson  
R. Martin  
Mrs. E. B. Meyer  
Louis R. Murray  
Miss J. Nevers  
Vincent Orlando

K. Ota  
Dr. F. Otterson  
Kunte Palin  
Rene L. P. Raoul  
M. Shigenari  
Mrs. N. Silver  
E. L. Skinner  
T. K. Tsukane  
Jack Turner  
Miss Louise West  
L. A. Whitford  
Frank Yelland  
Mrs. B. Young  
Guigliamo Zambrezzi





SECOND: *C. E. Lamphere*  
FOURTH: *Mrs. W. F. Eldridge*

THIRD: *Vincent Orlando*  
FIFTH: *T. K. Tsukane*



The so-called Advanced Pictorialist seems to prefer winter, snow and ice, white masses and black outlines, inasmuch as he would choose any particular time of year. But the ordinary amateur, such as you and I, enjoy the green fields, the full-leaved trees, the softer light and shadow effects, and the blue sky and warm sun overhead for our photographic efforts.

This is partly because the aristocratic camerist is ever on the search for something new, something different, and shuns what we, the common herd, might like. Passing through the high-hat stage he reaches a maturity of sense and judgment, sometimes, and accepts all seasons as rich in the beautiful and equally prolific in subject matter. Winter no more, no less than summer, snow no more nor less than green grass.

It is not along the lines of least resistance to brave the rigors of a January wind, the thermometer registering below zero, just to make pictures. The man is an enthusiast, indeed, who will take his camera and go afield when Boreas nips his nose and ears. It takes a great love of photography to do that, or a tremendous desire for salon honors.

We ease-loving snap-shooters are brave, too. Brave in facing the contempt of the ultraists. Brave in going on doing what we please and refusing to resign our liberty of choice and action to judges and juries. Brave in buying costly material just to please ourselves and those who enjoy what we enjoy. Brave in continuing to snap away though juries love us not and climbers heap contumely on our heads.

Poor, slighted dabblers we. Yet Eastman, Agfa-Ansco, and the rest owe a larger part of their prosperity to us. The Advanced Pictorialist came from our ranks. We keep the shops agoing and created the photo finisher. Deal with us leniently. Give us some credit.

Among painters, etchers, artists, the photographic pictorialist has a place. It is not always accorded him and he has had to fight to have his right recognized. But he has it, precariously, and through a limited representation he has it vicariously. Ergo, the snap-shooter has a place under the sun. Many, perhaps most of him, is working away from the high estate of art, but some are striving upward, some are seeking the way, some are achieving the altitude, at that.

#### MOTHER'S DAY

*Adown the vast, dim corridor of time  
My childhood walks again and looks at me:  
Sees this old head befrosted and arime  
And wonders if this thing can be  
The hopes he held, the future dreamed  
Back in the years when it had seemed  
Manhood must be a brave and glorious thing.  
And I look back upon that little boy  
That once I was, and hear a dear voice sing,  
And feel again a long forfeited joy—  
My mother croons the quite forgotten song  
That soothed her boy, so long ago, so long,  
So very long ago. And she is gone.  
Yet hand in hand once more she walks  
With me this day when all forlorn  
The old man slowly stalks  
Amid the sterile garden of his years  
And seeks in vain a blossom 'mongst the tears.*

Spring has been pictured in the arts as a young maiden decked in wildflowers. The arts are discriminating, perspicacious, intuitive, and correct. Young girls are very like spring flowers. The unpainted cheek, the lips unincarnadined, the unbound hair, the frank eyes are like the blossoms of Spring. It takes no painter to see the verisimilitude.

And maturer womankind does not lose its flowerlike qualities. The buds, open, have their charms. Summer has been painted as a woman grown, garnished with full-blown red roses.

In the abstract beauty is personified in the feminine in poetry, picture, sculpture, and if it may be said in music, too.

As a man, happily mated, fortunately blessed with girls, my soul responds to the old-world attitude of reverence, adoration of the sex. The southern gentleman of our land at his best lives with his hat in his hand to his womankind, not as a gesture of gallantry but as a living emotion.

Women have striven mightily for precarious place, have achieved much, are striding mightily far from their man-allotted places, and some have wandered aimlessly for the mere sake of going off the track. They are in every calling, and they will not be hampered by limitations humanly made for them. In photography they have essayed the best as amateurs and professionals and when the essentials of field cameras and equipment were reduced from a packhorse burden to a vest-pocket or reticule size they found themselves invited to become votaries of the dark-box and the lens.

Go where you will, do what you may, the women are there. If in the hitherto unwonted places they do well, welcome them. You never were in better company and may do better for their proximity. For many years you have delighted to make pictures of them, now make pictures with them.

#### DEAL GENTLY WITH YOUR WOMEN

*Deal gently with your women and be kind  
Lest in your later years your brooding mind,  
Nurse a regret that shall defeat your will  
And cry within your conscience nor be still.*

\* \* \*

*The pollen on the first sweet fruit of spring,  
The blush upon the freshly opened rose,  
The murmur of the brook where the birds sing  
Down where the placid weeping willow grows.*

*Blue sky and slowly floating cloud,  
Breezes and fragrance from the oleander trees,  
Deep woods the ardent noonday sun enshroud,  
And drowsy buzz of ever-busy bees.*

*Gusts of April wind and fitful rain  
Moods like petty whirlwinds on the field,  
Sweetness of pleasure and bitterness of pain,  
And lasting love that but her sex can yield.  
Unto the rougher, virile nature of the man.*

\* \* \*

*Be good to women, good as e'er you can.  
The Mother of God's Son no less than Eve  
Nor more than Eve, was made to bear and grieve.*

*Deal gently with your women and be good—  
Be patient and condone the changing mood.  
Bow low, uncover, and with graciousness give place  
To the eternal mothers of the race.*





### Reelo Motion Film Tank

E. Leitz, Inc., 60 East 10th Street, New York City, and their western agents, Spindler and Sauppe, with offices in San Francisco, Los Angeles, California, announce the Reelo Tank as one item more in their quite complete outfit.

The "Reelo" Tank is particularly constructed for use with film strips of the "Leica" and "Memo" Cameras and is as equally well adapted for film strips of other cameras which use standard motion picture film in short lengths.

It comprises a metal chamber, not affected by solutions. This tank contains a reel, made of "Bakelite," on which the film strip is wound in a dark room. The particular feature of this reel is that, due to the spiral grooves at each side, the film is retained in a separated condition, permitting the solution to have free access to all parts of the film. After the film has been wound upon the reel, the latter is inserted into the tank.

The film is very easily inserted into the reel and in an equally easy manner unreeled. There is no handling of wet film to cause scratches, a very important feature with small negatives, which are to be enlarged.

### Four Different sized "Reelo" Tanks Available

Size No. 1, No. 35315 is especially designed for "Leica" films and other standard moving picture film. The tank measures 5 in. and holds one reel upon which six feet of film may be wound. It permits developing one film reel at a time, since it accommodates only one reel.

Size No. 2, 35317 measures 5 inches. It accommodates two reels and consequently permits the development of two six feet film-strips at one time. The list price includes one reel only and additional reels must be purchased extra.

Size No. 3, No. 35319 measures 5 inches. The tank will accommodate three reels,

upon which three six feet film-strips may be wound and developed at one time. The list price is inclusive of one reel only and additional reels must be purchased extra.

If sufficient demand should exist for a tank supplied with a reel which will accommodate seventeen feet of film (for "Sept" or other cameras), these will eventually be supplied.

### Backgrounds

Backgrounds in motion pictures are effective for pleasing composition. For this reason, it is well to look beyond the subject, before beginning the exposure, to make sure that placement is proper for a well-balanced picture.

This is not difficult in the average scene. For example, suppose you are photographing the children playing on an open lawn; move the scene of action so that a hedge forms a background, and your movie will be much more pleasing, when viewed on the screen.

Avoid as much as possible light background areas consisting of sky, sea, or flat water and beach expanses. As a general rule, the most satisfactory scenes are those in which not more than one-third of the picture consists of such open areas. This is particularly true at this time of the year.

—Cine Kodak News.

### "Funny Paper" Scenarios

In many cases the most difficult part of producing a short amateur photoplay is the writing of the scenario. Unless one possesses some story-telling talent, it is no small task to sit down and, on the spur of the moment, work out a story that involves a real plot that is full of action and that works toward the climax without an instant's cessation of interest. Yet, these short scenarios are often very desirable, for they not only furnish an unusual amount of fun, but become a permanent record of those who participate.

There is one source of scenarios of this type, however, that is never-failing, and one which is a part of almost every household—the comic section of your local newspaper. Most of the little stories that are told in the “funny paper” contain a real plot and are replete with action. And, because most comic strip characters are odd-looking persons who dress in peculiar style and do most unusual things, this source of picture-ideas offers almost unlimited possibilities in the way of make-up, costuming, etc. A little ingenuity on the part of the one who is chosen director will bring about a surprising change in the appearance of the “star,” and every member of the cast from the poor, downtrodden hero to the haughty heroine will enjoy every minute of the fun.

—Cine Kodak News.

#### When Changing Lenses—

It is important that lenses used with the Filmo camera be screwed firmly into their seat on the camera head. Failure to watch this point will result in pictures that are out of focus.

All lenses for Filmo are so mounted that they are interchangeable, not only on a given camera, but on any Filmo. To make this interchangeability possible, the distance from the aperture plate to the front flange of the camera head is controlled very carefully in manufacture. A slight variation here would throw out of focus any lens applied to the camera.—Filmo Topics.

#### To Make a Box Voluntarily Fill Itself

A package of cigarettes or a box of candy or any objects can be made to seemingly pack themselves. Have the box with lid on resting on a table. Set camera so it will be solid and be careful not to jar it. The camera must be turned backward while photographing. When ready, proceed as above with a few feet of the still object. Then start the lid of the box to come off a little at a time, say a quarter of an inch, then after each little movement make two or three exposures backward on the film. When the lid gets to the point where it will balance, coax it so it will fall while being photographed. Start one cigarette by putting its end on the edge of the box, then slowly work it over the side as the cover was done, and then commence with other cigarettes in an

orderly manner with care to see that they are not jarred or pushed from the original placement. These can be arranged gradually on the table in the field of the camera exposure in any manner desired. A name can be spelled out at the finish. When this is projected, after a print is made, it will gradually perform the reverse action and the cigarettes will pack themselves in the box and the top go back on. This calls for some tedious work, as it will take several hours to make.

#### August Lighting Conditions

Of late years August has grown in popularity as a month of outdoor sports, vacations and picture-making. Because of this activity, August offers exceptional opportunities to the amateur cinematographer. There are pictures on every hand—pictures that you will be glad to see and recall during the long winter evenings that are coming.

Light conditions in August are very similar to those which obtain in July. If the subject is a sea, sky or beach scene or if the picture calls for distant shots of landscapes and mountains, f:16 will be found to give the best results in bright sunlight. If the sun is partially obscured by light clouds f:11 will work nicely, while dull days call for diaphragm f:8. Landscapes and ordinary scenes where there is no heavy shadow may be photographed at f:11 on bright days and at f:8 when light clouds partially obscure the sun. Where trees or houses obstruct the light from the sun, f:8 on sunny days and f:6.5 or f:5.6 on partially cloudy days will be found satisfactory. Scenes in deep shadow or along the shady side of streets will be best made at f:6.5 or f:5.6 while the sun is shining brightly and at f:4 when light clouds obstruct the sunlight.

It is important to remember that in making close-ups of any scene the next larger diaphragm opening should be used.

August is a month when dust and moisture are apt to collect on the lens of your camera and mar the beauty of your pictures. It is well to keep this in mind and to clean the lens frequently so that you may make the most of the many picture possibilities that are presented to you.

—Cine Kodak News.





## Association News

JOHN R. SNOW, Mankato, Minnesota, *President*  
CHAS. AYLETT, Toronto, Canada, *1st Vice-president*  
D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*  
GEORGE STAFFORD, Chicago, Illinois, *Treasurer*  
C. W. HOWSON, Minneapolis, Minn., *Chairman Commercial Section*  
PAUL TRUE, New York City, *Chairman Manufacturers Bureau*  
L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*

National Association Headquarters announce that they have secured the services of Miss Nina V. Waldeck to deliver a series of four lectures at the Winona School this summer on the subject of Portrait Composition. Miss Waldeck is a well-known portrait painter of Cleveland.

For a great many years, she was an instructor at the Cleveland School of Art. She has studied at the Art students League in New York under William Chase, Kenyon Cox and Max Bohm, and other notable American artists. She has also studied at Ecoles des Beaux Arts, official government school in Paris, and at the Julian Academy, also in Paris.

In addition, she has traveled and studied in Spain, Italy, Holland and Germany.

One of her recent portraits is that of Governor Donahey which is now hanging in the State Capitol at Columbus, Ohio.

Three of the lectures that Miss Waldeck will deliver will be on figure composition, covering the composition of busts, three quarter length and group compositions, as well as the aesthetics of portraiture, particularly relationship of the portraits of the old masters of painting in connection with modern portraiture.

One of Miss Waldeck's lectures will be devoted to anatomy, particularly the anatomy and muscular construction of the head.

This series of lectures will be of inestimable value to the students at the Winona School.

Registrations for both the Portrait and Commercial departments of the School are coming in steadily. Students who are contemplating either course are advised to get their registrations in at the earliest possible moment before the class limits are reached.

### The National Campaign

Nation-wide publicity for the Photographers' Association of America for the forward step it has taken in adopting cooperative national advertising and merchandising practices as a means of increasing the profits and the volume of business for its members, is contained in a four-page illustrated article which appears in the May 15 issue of Forbes Magazine under the title "Teaching Millions to Buy." America's photographers are cited as outstanding exponents of a "new and evolutionary" trend in selling practices which is stabilizing merchandising and producing highly satisfactory results.

The article, written by William A. McGarry, staff feature writer for the magazine, was conceived by Walter Drey, vice-president of Forbes, who has been greatly impressed by the great strides which the photographers and others who have employed the method have achieved. Mr. Drey and Mr. McGarry made a trip from New York to advertising headquarters in Indianapolis to study the results of the campaign and to get a complete picture of the whole enterprise.

Mr. McGarry in introducing his subject declares that the achievement stands out as a milepost of progress along the great American highway of distribution and that it marks the beginning of an economic evolution. He declares that in the opinions of those most closely identified with the movement, it is destined to bring to bear a greater influence on the stabilization of selling—particularly in the retail field—than the growth of hand-to-mouth buying.



## CAMERA CRAFT

In commenting on the many benefits which accrue to the industry or Association doing cooperative advertising and merchandising, the article express the belief that fully 50 per cent of its value lies in its development of the latent abilities of the individuals within the industry or Association. This is regarded as particularly applicable to the Photographers' Association as is evidenced by the increased enterprise manifested by individuals who before the national campaign was undertaken did little or no advertising and whose advertising when it was done was more or less haphazard.

### Winona School

The Board of Trustees of the school wish to have it announced that no registrations will be received at the school this year. All students must register in advance through the secretary's office, 2258 Euclid Avenue, Cleveland, Ohio.

The students this year will be requested to sign up at Winona Lake on the Saturday preceding the opening of the school, both Commercial and Portrait. The Commercial students will be asked to be on hand Saturday, July 14th and the Portrait students, Saturday, August 4th. By arriving at Winona Lake and registering in advance and getting settled at the hotels and room-

ing houses, no time will be lost from the important class work.

Director Towles announces that there will be lectures at the school in addition to the regular course, by President Snow, First Vice-President Charles Aylett, H. L. Corey, business counsellor of the association, and Maxwell Droke of the Millis Advertising Company, who will have direct charge of our national advertising campaign, and by James R. Branson, editor of the Association's magazine, The Pathway.

Charles Kaufmann of the Kaufmann and Fabry Company, Chicago, has been invited to lecture on "Commercial Photography, Its Future Growth and Possibilities."



### Master Photo Finishers of America

A. E. Block, President.....27 Von Hillern St., Dorchester, Mass.  
 Fred. Mayer, Vice-President.....Portland, Ore.  
 Wm. J. Meuer, Treasurer.....212 State St., Madison, Wis.  
 Guy A. Binzham, Executive Manager.....Box 1020, Rockford, Ill.

#### Territorial Vice-Presidents

South-Western States: W. F. Honnen.....1240 S. Main St., Los Angeles, Calif.  
 North-Western States: C. M. Coffey.....284 N. Commercial, Salem, Ore.  
 Mid-Western States: Chas. W. Lynn.....3917 Orleans Ave., Sioux City, Iowa  
 North-Central States: John H. Seamans.....7052 Jeffery Ave., Chicago, Ill.  
 Central States: E. L. Hurlburt.....315 St. Louis St., Springfield, Mo.  
 South-Central States: J. A. Hammond.....Box 650, Meridian, Miss.  
 South-Eastern States: Elon C. Robison.....105 Third St., N., St. Petersburg, Fla.  
 Great Lakes States: C. P. Phillips.....6930 Gratiot Ave., Detroit, Mich.  
 Dominion of Canada: W. A. Taylor.....274 Carlton St., Winnipeg, Man., Can.  
 Central Coast States: Wm. H. Eichner.....1210 "C" St., N.W., Washington, D.C.  
 New Jersey—New York City: J. G. Taylor.....24 E. 23rd St., New York City  
 New England States: H. K. Atkins.....Middleboro, Mass.  
 Mid-Eastern States: M. J. Koch.....535 Penn Ave., Pittsburgh, Penn.

## To Our Photo-Finisher Readers

### Trade Helps and Reciprocal Advantages

By Sigismund Blumann

National Camera Week brought one thing to our attention which might have escaped us under less intense stimulation. It was the quite unintentional, natural advantages accruing from manufacturers' advertising to the finishers and the sellers of photographic merchandise.

The various makers of window displays could not publicize their own wares without exploiting the taking of pictures. Everywhere that an advertisement appeared offering streamers, signs, show-cards, and so forth, pertaining to Camera Week, there the taking of pictures was encouraged.

We requested several of the display concerns to send us certain non-advertising cuts to illustrate our point, but for some reason Lane Brothers, Inc., were the only ones to respond with the desired material and we would acknowledge their help herewith.

Now, at this time and in this place, we are not interested in the merchandising of signs and window display, but we are very deeply interested in the popularization of photography, here and elsewhere, now and always, and it would seem that the members should not only liberally buy of the material of this sort offered by the Master Finishers' organization, but that the variety and attractiveness of private concerns' products could be bought and used with great benefit to the craft and to the manufacturers of cameras, negative materials and supplies.

It is conceivable, too, that the druggist and the shop will be more willing to give window space to a greater variety and a larger selection of attractive display than to more or less restricted matter of that sort. Attractive pictures, gay colors tastily combined, cut-outs, and artistic composition have an immediate appeal and a cumulative influence.



### Pacific International Photographers' Association

Embracing Alaska, Alberta, Arizona, British Columbia, California, Hawaiian Is., Idaho, Montana, Nevada, Oregon, Utah, Washington.

WILLIAM M. BALL, President; Corvallis, Oregon

#### Our Next Convention

Our convention dates are set for August 28, 29, 30, and 31, and the place has been decided upon as Portland, Oregon. A committee is now working to secure the best available housing, and as soon as this has been determined will publish data and informative pictures which I think will interest our membership and give a clear insight into what is to be offered.

At this time it is possible to announce features and attractions in only a tentative way but work is going forward and everything possible is being planned and done to make the coming event worthy of the P. I. P. A.

In the first place, there will be demonstrations in portraiture by a New York well known photographer, and we are hoping to have Ralph Young, and another commercial photographer from California in the commercial section. E. C. Vinson, the national secretary, has offered to go on the program, as has also Ray Jenkins. The Master Photo Finishers have not decided whom they want as yet. During the convention we hope to conduct round-tables

in the interest of the three divisions, under the various demonstrators. This has already been arranged for.

How to get the most out of your national advertising will very likely be handled by George Harris, as he told me at the Louisville convention he would come and appear on our program, if we wanted him. I wrote him a short time ago relative to his coming out, but as yet have not heard from him confirming.

The value and use of the P. I. P. A. Traveling Exhibit will also be brought out at the convention, while, of course, "Certified Photography" will perhaps hold the field of interest among the old stand-bys of the profession.

A recent letter from Harry Fell indicates that we may expect practically a full representation of manufacturers and dealers, since we decided on the dates above mentioned. I might add that we had wished to hold the convention earlier in August, but found it practically impossible, owing to so many Eastern conflicting dates, to get the manufacturers and dealers here earlier.

## CAMERA CRAFT

There was a meeting held in Portland last Thursday, for the purpose of organizing definitely the various committees, but it was suggested that for the present the committees go unannounced, since I have not had an entire confirmation of their acceptance.

Within the next ten days, at most, I hope to have the matter of committees all listed and definitely settled, and will then give you a good outline of the program, together with the list of committeeships.

Signed:

W. M. Ball, President.



Ye Editor Retaileth Neues of Ye Profession and in Quaint Italics Titillateth Ye Sphynx with Hys Quill

### C. H. Sunderland Injured

At a public affair where walnuts seemed to have no better use than as missiles, some humorous individual threw with such skill as to strike our muchly liked brother Sunderland in the eye, smash his glasses and drive over thirty-two fragments into the eye itself. A pleasant pastime for such as derive joy from causing pain. Fortunately it is hoped to save our friend's sight, but the agony and loss of valuable time still remain to cheer the gay soul who threw the missile. To the thoughtless and over-exuberant we send this message as a lesson that throwing anything is not a refined pastime, throwing hard things is dangerous, and that no one was ever hurt by a walnut that was quietly cracked and eaten. It is hard to derive any humor from the happening but maybe Clive can work up a smile at the idea that he was hit by a nut. None other would have done it.

### George H. Breaker

George H. Breaker is over sixty years of age, the president of the American Title and Guarantee Company of Houston, Texas, and a retired lawyer of high standing. Of photography he confesses to knowing little but he is interested in our art and science and we are interested in his interest in a most peculiar way. The gentleman whose place in the world of business and whose legal training may be accepted as making him proof against credulity or be-

ing duped, is investigating and affirms he has had proofs of supernormal phenomena in many forms, most tangible ones in photographic impressions on plates exposed through the original unbroken boxes and several thicknesses of wrapping paper, sealed and signed against possibility of tampering.

We were unable to attend his lecture, to which we had been invited to act in the honorary capacity of his introducer, at Scottish Rite Hall under the auspices of the Society For Psychical Research but have been told that he had much that is wonderful to tell and showed many remarkable pictures projected on the screen. Photography is involved in quite every activity of modern life. In business, medicine, law, criminology, and in most of the trades. It now seriously enters the metaphysical.

### Commercial Photographers of Los Angeles

A large number of our members gathered at the Mission Photographic Service Company's new laboratory at 1919 S. Hoover street, corner Washington street, at 6:15 P. M., May 17, 1928. From there we went to a nearby Hungarian cafe, had a very splendid dinner which was thoroughly enjoyed. Then returned at 8 P. M. to the laboratory, where Frank A. Hansen, a lighting engineer with the Holophane Company gave us a very illuminating and instructive lecture on light, its source and uses.



## CAMERA CRAFT

We had a number of extra lights that were loaned to us by the Mole Richardson Inc. a lighting equipment company.

It seemed that the interest would never end and it took us until after 11 o'clock to find a place to stop. Mr. Hansen surely knows his lights.

### W. J. Prater Traveling

We recently received a postcard from Mr. Prater and note he is viewing the show places of America in a dilettante way. Carrying his good time with him as he generally does, we have no doubt of his enjoyment.

### In Memoriam: George B. Luckey

George B. Luckey, Chief Photographer of the Baltimore and Ohio Railroad Company, died of pneumonia at his home in Hyattsville Md., May 15th. Mr. Luckey who was 55 years old, has been with the railroad for more than 30 years, having started with it in 1887 as a clerk in the passenger department. Later he was identified for a while with the New York Herald as a photographer, and afterwards with Leslie's Weekly in a similar capacity. Re-entering the service of the Baltimore and Ohio in 1898, he became its photographer and except for a furlough from 1901 to 1903, has been in charge of the photograph department ever since.

Mr. Luckey had charge of the taking of all the still pictures in connection with the Centenary Exhibition and Pageant last fall. Under his direction there were taken more than 2,500 pictures relating in one way or another to the centenary celebration many of which were taken personally by him. A large number of these pictures were used for newspaper, magazine and other publicity purposes including the catalog and brochure.

### John A. Walker, Requiescat

The following simple and touching tribute comes from John H. Staden. It is most fitting that our best obituary should come from a fellow professional.

John A. Walker, long resident of Marshfield, Oregon, and a faithful friend of Camera Craft, died suddenly Easter Sunday. He was a true artist of the beautiful and lived in San Francisco many years before coming north. He was a resident of the city in which he died for twenty-one years.

### Leslie T. White

When not engaged in studio work Leslie T. White seeks adventure and all in the line of his business. He makes portraits of men, women, children, and if necessary as has happened of wild lions and things. Recently he perched on the wings of a careening aeroplane to get views. A varied experience the reader will admit, and such as should fit a man for the broad and comprehensive practice of photography. Fellow professionals will always find a welcome when in Ventura at the White Studio at 421 Chestnut.

### P. A. of New England

The next convention of this sectional organization, and it is a large and important one, is to be at Maplewood, N. H. at the wonderful Maplewood Club in the White Mountains. Exhibitors are urged to get their prints to the Hanging Committee, Photographers' Association of New England, Maplewood Club, Bethlehem, N. H. on or before September 7th. There are classes and awards for gum and bromoil portraits open to the United States as well as the usual other classes. For further information you are invited to send to L. W. Rand, President, Brockton, N. H.

### P. A. of Northern California

If constructive, instructive, highly specialized information is what photographers want, those who attended the meeting on the evening of May 31 must have been highly gratified and satisfied.

Scott Sterling, of the Bausch and Lomb Research Laboratories, is one of a half dozen or so experts in photographic optics, accepted as final authorities on lenses. His talk was the more pleasing for its absence of oratorical effect and its fullness of meaty technical material. It was all information.

The informal delivery, the total absence of egotism, the deep interest in his subject and his evident desire to tell all he knew that might be of use and help to his hearers, endeared Sterling to his audience.

Photographers in many instances buy and use lenses much as a carpenter might be said to use his square. They take it for granted that a lens is a lens, that one may work at larger apertures than another, that one may cost more than another, that one is said to be better than another, but sel-

dom do they conceive that several lenses all good may each have peculiar and particular uses and merits. The most profitable part of the eminent speaker's discourse was perhaps that which told of how to use lenses in the abstract to the best advantage.

The attendance was good and the Oakland contingent was well represented. The meeting was held at the Hotel Clift and was preceded by a dinner such as one might expect of that hostelry.

The next meeting is to be at Martinez but the date has not been fixed as this issue goes to press. President Lancaster assures us it will be another one of those landmarks in the history of this association, like the previous Martinez gatherings or better.

#### Commercial Photographers' Club Picnic By Ida M. Reed

The Editor, having troubles of his own, missed the good time we all expect at any affair given by the East Bay Photographers. The picnic at La Honda Bowl on unday, June 10th, was no exception.

The day might have been better, though the sun was warm, the wind was cold and it did blow. The boating promised failed to materialize. It was a josh—that boating and swimming. The dam was broken and the water had disappeared. It is no fun to swim in the mud and oars work hard.

Some genius, Mr. Blumann says it must have been Izzy Bird, managed wires and portable phonographs and radio junk with great success and we had music and dancing.

The lemonade was delicious and no matter how many helped themselves and however often or much the vessel was always full—reminding one of the loaves and fishes. So was the coffee good though late in arriving. Many inquired where Roy Williams was for he and the coffee traveled together.

It was a different sort of picnic from most. It was restful and cheery, and although there were no big, rollicking games, the get-together spirit was there and we had a chance to see one another and one another's families and to see the regular, old-fashioned family father and mother cavorting with the children.

All in all, there was pleasure in just sitting around to josh and talk.

And now let Ralph B. Bird, secretary of the East Bay Photographers' Club, tell one. Here is his contribution:

"Under separate cover I am mailing you a rather poor print of the group picture I took upon my return at about 6 p. m. Many of the folks had gone away, but I took it as sort of a souvenir and thought perhaps you might like one.

"The Men's Shooting Contest was won by Wm. K. D. Reynolds with a score of 25 out of a possible 30. F. R. Church was second. The prizes were contributed by Davies, the first being a fine fountain pen and the second a very fine pencil.

"In the Ladies' Shoot, Mrs. Robert Hunter was the winner of another fine fountain pin contributed by Davies. Mrs. Hunter is the wife of Officer Hunter and is also an excellent shooter of prints.



"The Prize Waltz was won by Officer Robt. Hunter and Mrs. Mary Hampton, the prizes which were donated by Osgood's Drug Co., being a gallon Thermos jug and a box of candy.

"The horseshoe elimination contest was won by Mr. Malcolm, who married Mr. Charlie Estey's charming daughter last Saturday night. The prize was another thermos jug (1 gal.), donated by Osgood's.

"Constable Adams (with Osgood's) presided over the Kangaroo Court with great success in collecting fines to defray some of the picnic expenses until he was called to account by a real officer.

"President Kelley filmed a one-reel skit, as directed by his associate, Mr. Nesbit, which will be shown at our next meeting.

"Dancing for the grown-ups and races for the children completed our enjoyable day.

"As a matter of record, Statistical George compiled the following data: 111 people present (some of them photographers, too), 22 machines (meaning automobiles, not sewing machines), 14 babies (belonging to parents on the grounds).

"Signed and attested,

"R. B. BIRD, Secretary."

## NOTES & COMMENTS



### Welcome Daddy Lively

The following excerpts from a letter issued by our old and dear friend, Daddy Lively, carries its own message. We would add that anything Daddy says is worthy of acceptance:

"We are equipping our large 40x70 room on the first floor in East Wing with day, electric and flash lights for short terms in Negative Making, and will begin Monday, August the 6th, 1928.

"It is our aim to teach how to make good negatives in the various styles of lighting now in general demand, and do so in the shortest period of time.

"By specializing in this department and making the work intense and continuous we are positive that one week will be sufficient time for one with experience, and this will cut down the expense for board as well as tuition. Should the student desire longer time it can be had at a reduction of tuition, as the school will continue indefinitely.

"As the classes will be limited in number to twenty-five, in order that we may give each personal attention and instruction, it will be necessary for each student to secure reservation by a deposit of five dollars. You can select the week most convenient for you when you make application for reservation."

### A New Voigtlander Camera

Quite recently, the Voigtlander factory in Germany sent to the American market a really marvelous little roll-film camera, which, although it is scarcely larger than the well-known Vest Pocket Series, takes a picture 2"x3. In its equipment accessories etc., it is a replica in miniature of Voigtlander's 2½x4¼ size Roll-Film Avus. It is equipped with a Voigtlander F:4.5 Skopar lens in Compur shutter. It has both brilliant, reversible finder with spirit level and iconometer direct view finder and thumb focusing lever with distance scale and leather bellows. The camera sells at \$27. Willoughbys, of New York, recently made some 11x14 enlargements of negatives made with this camera, and, except to seasoned professionals, these enlargements had every appearance of contact prints. This little camera compares very favorably with other foreign-made cameras selling around \$50.

### A Goerz Announcement

The C. P. Goerz American Optical Co. announces that the Goerz Reflex focuser for Filmo & Victor cameras is now made so that Cooke Standard 4-inch f-4.5 and 6-inch f-4.5 lenses and Dallmeyer lenses of equal focusing length may be fitted and used as well as all the Goerz lenses from 3 inches up.



## Death of T. H. Wilton

After an illness of over a year T. H. Wilton passed away June 12th and so concluded a long and useful career in the photographic industry. He had been in the photo supply business since 1911 and the affairs of the concern he founded are to be conducted by his widow, daughter, and Randall Scudder who will be in charge. Mr. Scudder was with the firm for nine years and his close association with Mr. Wilton leaves him almost as bereft as the family. But business must carry on and the honors we do the dead, probably, find their sincerest expression in so carrying forward the work they projected.

## The Zeiss Line of Cameras

Somehow Zeiss is associated in the public mind mainly with lenses, particularly with a lens,—the Tessar,—more particularly with one sort of Tessar, the I. C. Let the reader obtain and study the Zeiss Ikon Catalog and he will be as surprised as we were to note that the line of cameras is remarkably complete and fully up to Zeiss standards. The Icarette in its various sizes and styles is already popular with those in "the Know" but the Nixe and Cocarette in roll-film, and the Ideal, Tro-na, Orix, Jewel, Palmos and Deckrullo should be examined as outstanding plate and film pack models. Send for the catalog to Carl Zeiss Inc., 485 Fifth Avenue, New York. It will be worth your while.

## Albert S. Howell Honored

Albert S. Howell, Chief Engineer of the Bell & Howell Company, was awarded the Wetherill Medal on May 16 by the Franklin Institute in Philadelphia. The Wetherill Award is for outstanding discovery, invention or development in physical science. This distinction was conferred upon Mr. Howell for the development of motion picture cameras and projectors adaptable to the amateur. As Chief Engineer of the Bell & Howell Company, Mr. Howell has been responsible for the designing of the FILMO Cameras and Projector—the work which entitled him to this high award.

Fifteen other men noted for scientific achievements in widely varying fields were presented with medals by the Franklin Institute in the same ceremony. Henry Ford,

"in consideration of his rare inventive ability and power of organization, by means of which he was able to effect high-speed production of automobiles," received the Cresson medal.

Albert S. Howell has been active in the Bell & Howell Company since its organization in 1907, and is busy constantly designing new equipment and improving previous equipment for the professional motion picture industry and for the rapidly growing number of those who make their own movies.

## Simplification of Photographic Equipment

The Division of Simplified Practice of the Department of Commerce has been invited to co-operate with the manufacturers of photographic equipment in applying the principles of Simplified Practice to such items as screw threads for lens mounts, shutters, etc.

Preliminary details incident to the organization of a survey of present production and demand, will be considered by a conference of manufacturers of these commodities on June 18th. The meeting will take place under the auspices of the Division of Simplified Practice, in the conference room of the Engineering Building, 29 West 39th Street, New York City.

## Startling and New

B. Hopfen and Company, 235 Fourth Avenue, New York, sent us the following announcement which seems to promise something revolutionary. Further particulars and prices will no doubt appear in the advertising department in this or subsequent issues.

This is to inform you that we are placing now on the market, a smokeless flash powder under the name of FUMOSIN, which has never been known in this country before. It is smokeless to such an extent that, no matter how much powder is blown up in a small place not the slightest trace of smell or smoke can be noticed. At the same time, it is as fast as a high-speed flash powder and has sufficient kick to set off any gun which is used to synchronize the flash with the shutter.

This FUMOSIN smokeless Flash Powder goes off noiselessly, and is manufactured by the Geka Werke in Germany. The

## CAMERA CRAFT

same factory has placed on the market an electric bulb which screws into any socket. This bulb is filled with a charge of very fast flash powder with a vacuum inside. When the connection is made, the flash powder sets off a very powerful light which is thrown in every direction through the parabolic shaped glass, but no noise, on account of the vacuum, can be heard, and, of course, no smoke or powder can be seen because it all remains within the bulb.

### A New Ansco Specialist

V. P. Long has been assigned to the western division of the Agfa Ansco Corporation in charge of Memo Sales. The time seems to have arrived when the little camera with the big possibilities will not be content to run on its momentum of popularity and demands individual attention. Sales growing beyond all anticipation and demand outrunning the dealers' willingness to stock it calls for one man's whole time to care for adequate distribution. Mr. Long is well liked whenever and wherever known and it will be easy for him to convince the trade that the demand exists and must be satisfied.

### Martin L. Wolver

With his Hammer (Dry Plates) always with him, Martin wandered amiably into these offices the other day and reported that all is well. It always seems to be with this genial representative of a genial house. When not traveling in the large cities of the coast Mr. Wolver lives in Los Angeles, in which place his son is engaged in the practice of law. Los Angeles is on the Southern Pacific line between San Francisco and points north and Tia Juana.

### Harry T. Becker

For years, off and on, Fritz & Hawley have looked to Harry Becker to keep the photographers of Connecticut all coming in one direction, toward their establishment. Harry likes the big open spaces and about every so often he has a habit of packing up and going into the wilds of Los Angeles and such places where mountain peaks and lofty pines pierce the never clouded blue of heaven's dome, or words to

that effect. But comes the call to his real place and back he goes to Connecticut and Fritz & Hawley. When he called at these offices he was homeward bound and we know he will be glad to once again connect with his old established friends and customers, and that the firm will be glad to have him about, and certainly we were glad to have met him and hope he feels as we do so that we may keep in touch.

### The Indupor

Stereoscopy has suffered a long hibernation that extended through several winters and summers, too. The puzzle was why. So charming a way of making and viewing pictures would seem to create an endless pleasure. To see photographs in relief and with the solidity of nature is not an ordinary delight. The cause probably will be found in the hitherto bulky cameras and stereoscopes. Now, with the pocket Indupor Camera and the Vest Pocket Indupor Stereoscope all objections are removed. The viewing apparatus is positively no thicker than a vest-pocket diary and about as long and twice as wide. Your dealer can show you the outfit or write to Marvin R. Cohn, 24 California Street, San Francisco, California for informative literature and illustrations.

### Eastman Kodak at Atlantic City

Atlantic City, N. J., June 2.—The Eastman Kodak Company today joined the array of manufacturers whose products are before the eyes of the visiting world on the boardwalk when a photographic exhibition room and store was opened in the same block with the Hotel Traymore. Exhibits already here include General Motors, Victor Talking Machine, General Electric, Westinghouse Electric, Underwood Typewriter, Du Pont, Brunswick-Panatrope, and the Crane Company.

The Kodak exhibit will contain a large collection of photographic art, a home movie parlor for demonstrations twice daily, and photographic and amateur movie apparatus of all varieties. In addition there will be a developing service for some of the thousands of films exposed on the beach.

W. F. Chipman, Jr., is manager of the new exhibition.



Conducted by SIGISMUND BLUMANN

### Summer Exposures

After the dull light of winter it takes some time for the amateur to accustom himself to the changed conditions of summer. If you have been using  $f\ 4.5$  or  $6.8$  and giving  $1/25$  second exposures cut down the aperture or increase the speed considerably. Under ideal light conditions even  $1/50$  at  $f\ 8$  will give ample exposures in late Spring and Summer. There is an established practice on the part of the average snap-shooter to overexpose in open landscapes and seascapes, and to underexpose in the woods. Do you avoid these errors? Make your mistake on the side of over-exposures under trees and underexposure in the open. Best of all get a reliable Exposure Meter and make no mistakes at all.

### Paper Negatives for Birthday Cards

By Howard S. Niblack

My first attempt was so successful that I am naturally elated and want to pass the good news on to my fellow amateurs. There is really nothing to it: You can make paper negatives easily. Just take any of the thinner contact or enlarging papers and go ahead as if making an ordinary print. Put this in the printing frame and make another, a negative print this time from your positive. There you are.

If you have masked off your picture you can now draw any design or lettering on the white space and go over it with India Ink. Should your skill in this work be lacking get your designs and letters from any magazine or holiday cards and trace it. From this negative you can now print your own birthday cards and if you like odd effects, try heating a metal curtain rod red hot and scorch the edges, which will call for rather quick action and that the heated rod be held with an asbestos insulation.

### The Best Place for a Ray Filter

With most lenses the placing of a screen in front of the lens produces a changed focussing condition. On Roll-film cameras with short focus lenses this is negligible but most Graflex users prefer longer focus objectives and find it irksome to focus first without the screen for critical sharpness, for which they need all the light they can get, and again for the adjustment after putting on the filter.

On certain Graflex and other Reflex cameras the lens board may be easily removed and the screen put on the back of the lens. This obviates any changes in focusing. As a broad truth it may be said that back of the lens is the better place for ray filters anyway. Let the good lens gather all the rays of the image and then tint them for the negative with your behind the lens filter.

### Positives on Paper In the Camera

At least twenty inquiries have reached us in the past month as to how the Photomatic and other devices produce positives on paper without an intermediate negative. The paper is made for the reversal process and is patented we believe under the trade name of Positype. It is a very rapid Iodide Bromide emulsion, is exposed, developed, washed, bleached, reversed, washed, fixed, washed, and dried in a continuous roll, mechanically and within the machine. The entire operation is said to take ten minutes but as the first prints are running through while the second is being exposed and so on this is a rather inaccurate statement. To do by hand what this machine accomplishes in ten or fifteen minutes would take half an hour.

Why should any photographer want to make positives in the camera? As an automatic proposition it is imperative, and as a hand operation is prohibitive. The



time consumed in bleaching, reversing, and redeveloping is no shorter than in developing and fixing a negative.

Still if you find a pleasure in experimenting try exposing any very rapid bromide paper of the semi-mat, studio, or like surface and proceed to develop and reverse as in the Autochrome of Agfa Colorplate directions. You may fail but as success could only offer a passing gratification, it will not matter.

### Cleaning a Lens

There is too much rubbing and breathing on lenses for their good. If you be careful your lens should not get dirty. Dust will gather on the smooth surface and that is bad for definition, but a soft camel's hair brush will remove that. I have filled the quill handle of such a brush with plastic wood in which a tiny brass ring is imbedded. This short handled brush is fastened to the camera front by a stout silken thread and is closed with the front board as is the cable release. Once or twice a year an expert optician cleans my lenses. He knows how.

### Etching on Glass

A beautiful way of labelling bottles is to dissolve Sodium Fluoride and Gelatine in water, using twenty grains of the salt and 10 of the gelatine to an ounce of water. Paint this on the glass with a quill brush and when dry gently brush over some acetic acid. In a short time the liberated fluoride gas will have etched the glass and the coating may be washed off under running water. Be warned that any salt with the name Fluoride is a deadly poison and highly corrosive or escarotic. Apply the acetic acid in the open air and know that it, too, is useful but dangerous. As a matter of principle never taste, never inhale, and never touch any chemical used in photography with the naked skin.

### "LIGHT BOX" FOR COMERCIAL WORK

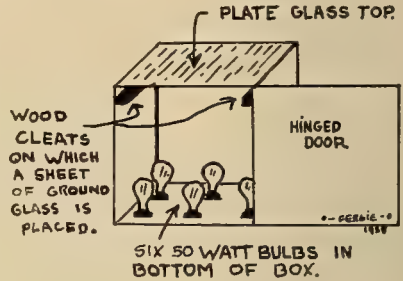
By L. C. Ferguson

A simple and easily constructed "light box" for making photographs of bolts, gears, tools, etc., is shown in the sketch.

A wooden box of any convenient size is first constructed, the top of which is plate glass. Beneath the top is a sheet of

ground glass which acts as a diffuser. In the bottom of the box are arranged six or more 50 watt bulbs for the illumination.

The articles to be photographed are placed on top of the plate glass. The lights are turned on underneath, and together with a "top" lighting the articles are photographed; the camera being placed directly over the box. This combination lighting gives a nice appearance to the objects, eliminating dense shadows.



### The Best Lens

Hardly a week passes but someone writes in to ask which we consider the best lens. This will answer the question honestly if not satisfactorily. The best lens is the one that does just what you want done in the time, and way you want to do it. An ultra aperture objective in the hands of an amateur who never takes pictures before nine in the morning or after four in the afternoon is like an automobile capable of 80 miles an hour driven and owned by a man who would drop dead of heart disease if his speed exceeded 25 miles. A Rapid Rectilinear lens in the hands of one who wants to shoot trains moving at a mile a minute, portraits by candle-light, and building with every line true and minutae critically sharp is a bum piece of glass, yet the landscape pictorialist takes off his anastigmat and puts on an R. R. to get what only the defects(?) of such a partially corrected lens can give him. I am a Nut. My name is legion. We are unconsciously members of the World's Organized Happy Nuts. I have a lens for every purpose. Some day I shall learn how to get the most out of each of them. In the meantime the best of my lenses is the one I happen to have on the camera at the time. Lenses are that way.

SALON WEEK  
IS COMING

EVERY PRINT  
A WINNER



# CLUB NOTES



## Forthcoming Exhibitions

September 2nd to 30th, at Lwow; October 1st to 31st, at Wilno. Second International Salon, Pologne, Lwow, Wilno. Drugi Miedzynarodowy Salon Ji Artystycznej W Polsce, Lwow, Wilno, Pologne, 4 Rue Sokota. Closing date, August 1st.

September 3rd to 8th, inclusive, 1928. Eighth Annual International Salon. New Westminster, B. C. Secretary, D. E. Mackenzie, Hart Block, New Westminster. Closing date, August 18th.

September 17th to October 13th, 1928. Seventy-third International Salon of the Royal Photographic Society of Great Britain. Secretary of the R. P. S., 35 Russell Square, W. C. 1, London, England. Closing date, August 17th.

October 6th to 21st, 1928. Twenty-third Annual Paris International Salon. Secretary Societe Francaise de Photographie, 51 Rue de Clichy, Paris, France. Closing date, September 1st.

October 6th to November 4th, 1928. Second Salon Italiano D'Arte Fotografica Internazionale. The Committee of the 1928 Celebration, Gruppo Mostre Temporanee, Salon De Fotografica, Parco del Valentino, Torino, Italy. Closing date, August 31st.

## Omaha Camera Club Exhibition

From May 15th to 31st the Third Annual Exhibition of Pictorial Photography hung on the walls of the Art Institute of that city and proclaimed that a handful of enthusiasts can, as a nucleus, grow into a large and influential organization. Not large in numbers as numbers go these days but large in proportion of active, enthusiastic photographers. Thanks to fellow members Overman and Johnson we received the catalog and press notices and a most beautiful spread in the Rotogravure section of the Omaha Bee-News. The first award print is worthy of its honor but it strikes us as hard to put that exquisite bit of composition by Walter Hazelton as second. It seems that here the paradox of two firsts is exemplified. Hazelton has most artistically carried a curved line from the upper left corner down to the center of interest and attention whirls around the circle of the silver plate to the urn placed just right. We cannot judge the values and texture from the reproduction before us but these being equal to the conception we should say it is a splendid bit of conventional designing. Conventional is a phrase of classification not qualification, be it understood.

## Japanese Camera Club of San Francisco

The Sixth Annual Salon of this rapidly growing organization was hung from May 24th to June 5th in the main rooms of their club building. The prints were unusually good and though smaller in number than hitherto sounded a loftier note. Louis A. Goetz and Sigismund Blumann were the judges and the awards were as follows: First, K. Takahashi; Second, M. Uyaki; Third, T. K. Tsukane; Fourth, H. S. Kaito; Fifth, K. Kojimoto and an additional award of First in Contact Prints to T. Kawaguchi. Again M. Kawai, head of the Midzuho Company of 1639 Post Street, presented six silver cups graded as to size and had these suitably engraved to each award winner. A parchment certificate is given by the club as official recognition. The outstanding feature of these salons is that those who fail to receive awards or even to achieve a hanging do not waste time or mood in reviling judges but invite criticism from each member of the jury and discuss the matters so brought to light amongst themselves. If there be any who wonder why our Japanese fellow artists excel, let them learn anew that modesty and a determination to improve is the secret.

### New Westminster Salon

Let none who values his standing in pictorial photography overlook or neglect this yearly opportunity to appear in the best of company. The eighth annual International Salon opens on September 3rd and runs for five days only. There is no entry fee and the closing date is August 18th.

### California Camera Club

June saw the C. C. C. at Yosemite taking everything in sight. Masterpieces are due and the next club exhibition is going to be a humdinger, or why? Also this club is going, in fact by the time this reaches the reader's eye is at, to the Yellowstone. They always have a wonderful time and if Prex Wilson is going, has gone, along that good time is enhanced. In the May competition Ed. Dreusike won the prize. We note in the June View Finder another variation on the titles conferred by the Royal Photographic Society of Great Britain. The printer has made Hobart N. Durham a H. R. P. S., which consoles us a little for in our own book our esteemed printer has entitled us an A. S. P. S., which even the most casual will recognize as an insect that sings. Or is it a snake? Terrible!

### The Photographic Guild of Philadelphia

The "Foto-Hikers" are off! With their kodaks, their cameras, their tripods and their what-nots, with a fresh batch of films or plates, the Photographic Guild "Foto-Hikers" are all set to get a wallop at the Isaac Cohen Gold Prize Contest.

At the monthly meeting of the Philadelphia Photographic Guild, held on Monday, May 21, President Frank V. Chambers brought up the subject of getting the club members out into the open by means of camera outings. This met with approval and to give the boys something to shoot at, one of the most loyal supporters of the Club, Isaac Cohen, offered to give three prizes for the three best pictures submitted to the Print Judging Committee, consisting of Fifteen Dollars, Ten Dollars and Five Dollars, all in gold, to be awarded at the end of the season, about November 1st, after all prints are in the hands of the committee.

Briefly, the plan is this. Camera Outings or "Foto-Hikes" will be arranged every

month by an outing committee, consisting of W. R. Butler, Chairman, Vincent B. Harris and Joseph Sirrococo. They will select the location to be visited and the date. The trips may be weekly, they may be on Saturdays, Sundays or on holidays, the meeting place will be posted on the bulletin board, as will the hour of meeting. Notices will be sent in the mail also, so that every one will know of it. The committee will welcome any suggestions from members as to the locations for hikes. When the crowd gets together, they will proceed to the location, accompanied by some advanced worker in photography, who will assist each one in getting as good a negative as possible, answering questions regarding exposure, stop, placing of camera, etc., leaving the rest to the individual expression of the maker, the principal requirement being that the pictures be taken while on one of these outings. A general scene will be selected by the leader, and then the "Hikers" can go as far as they like in selecting whatever viewpoint they wish.

Genial Mr. Jackson has offered to go along, provided they don't insist on too much walking. We expect to have other experienced workers, including some of the pictorialists of the city, and much valuable knowledge will be gained from such a method.

All pictorialists, in embryo and well grown will get some negatives from these trips, from which they will make their contesting prints. For the sake of uniformity, all prints must be 8x10 or closely approximating that size, so that all will have an equal chance in that direction. No restrictions as to camera, lens or other apparatus is made, you can use anything from a pinhole to a quartz lens if you wish, you can make your print by any process you wish, printing out or developing paper, bromoil, gum, or straight enlarging.

Each month three prints will be selected and held for the final judgment in the fall or early winter, at which time the three best will be awarded the Gold Prizes and three Honorable Mentions will be also awarded, the winning prints to be hung in the Club Salon.



SAN FRANCISCO  
PUBLISHED MONTHLY

# CAMERA CRAFT



NEAR LAKE LOUISE

*On the Canadian Pacific*

SAN FRANCISCO

CALIFORNIA



**gevaert**



FOR PERFECT PICTURES

## Ortho Commercial Film

(H. & D. 400)

Excellent for field work. A color sensitive emulsion of the same speed as Roll Film.

### Fine Grain ————— Great Latitude

Rich in silver. Enables the photographer to obtain any desired degree of contrast.

Descriptive Catalog on Request—Address Dept. No. 4

**THE GEVAERT COMPANY OF AMERICA, Inc.**

423-439 WEST 55th ST., NEW YORK CITY

CHICAGO, ILL.  
413-421 N. State St.

PORTLAND, ORE.  
345 Salmon St.

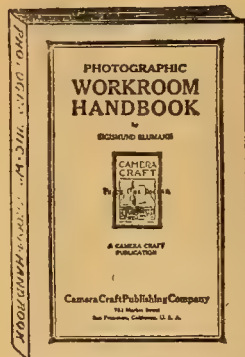
TORONTO, CAN.  
347 Adelaide St., West

*Dealers in Principal Cities of United States*

*The Gevaert Company has been manufacturing photographic products of the highest quality for 34 years—since 1894*

THE BEST TEST

IS A TRIAL



*The Second Edition*

## Photographic Workroom Handbook

By SIGISMUND BLUMANN  
Editor of Camera Craft

IS READY NOW

The first edition in paper covers is exhausted and in accordance with its fixed policy, Camera Craft shares its profits with its friends by putting the surplus into production without increase of price.

This edition is fully corrected, enlarged by several formulae and

**BOUND IN CLOTH AT THE SAME PRICE**

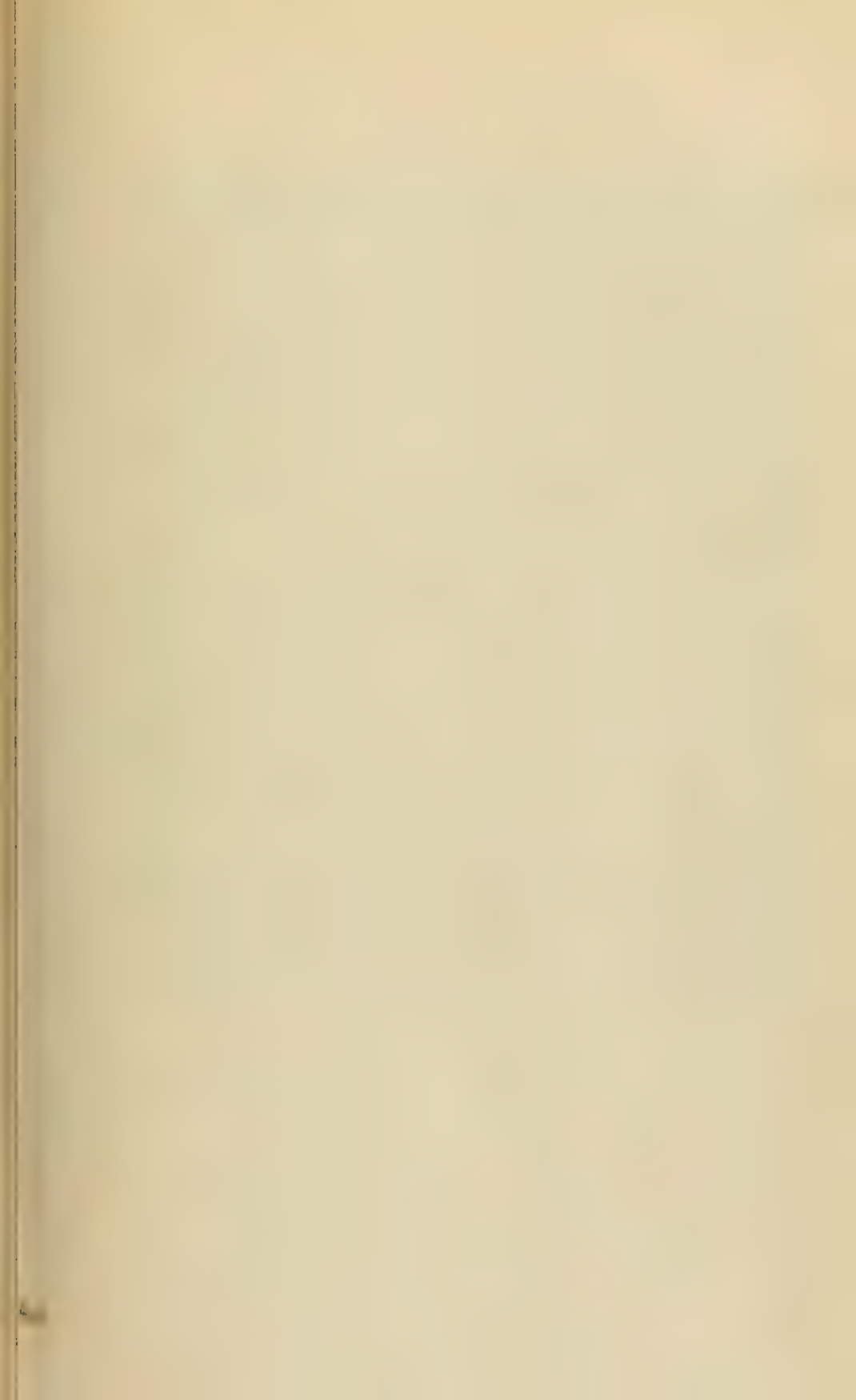
**ONE DOLLAR**

*At your dealer or from*

**CAMERA CRAFT PUBLISHING COMPANY**

CLAUS SPRECKELS BUILDING

SAN FRANCISCO, CALIFORNIA







AUGUST

A PORTRAIT  
*Bianca Conti*

# CAMERA CRAFT

*A Photographic Monthly*  
».....«  
SIGISMUND BLUMANN, EDITOR

*Claus Spreckels Building, San Francisco, California*

FOUNDED MAY 1900

VOL. XXXV

AUGUST, 1928

NO. 8

## Hiromu Kira, a Japanese Artist Who has Poetized Paper

By Sigismund Blumann

In the mass of Pattern Stuff that has variously affected pictorialists but can little affect the basic principles of Art something comes to the top now and then that impresses one as likely to survive the fad of the time.



Hiromu Kira has added to the sensual appeal of lines and masses, the finer appeal of texture. His work in light and shade and the delicate nuances of both is nothing less than magic. To make broad expanses of a single shade sing is an achievement. To play one delicate shade against another not strikingly removed in value and create moods with sweeping curves and juxtaposed rectangles is greatness exemplified.

The pictures reproduced herewith tell no story, they are not illustrative. They are as indefinite in arbitrary meanings as a classic musical composition. They are like music, too, in that the appeal is to a higher faculty, to a sixth sense, which coming of inspiration, inspires.

Mr. Kira was born in the southern part of Japan, thirty years ago and in 1922 came to San Francisco as secretary of the Japanese Associations of America. His advent in this country dated back to 1917 when he came as a student. Moving to the Northwest some years later he was an active factor in the establishment of the Seattle Camera Club, which at that time was a democratic and equally shared distinction. He is now in Los Angeles and has added by that much to the distinction of a city that has much of which to boast and is not delicate of exercising its prerogatives.

Charmed by such Kira prints as it was my privilege to see, I solicited an article from him and what appears here is given as it came, without any material changes. I feel that were I to Anglicize by a word his verbiage, somewhat of the charm and flavor of his personality might be lost. This should be said, he is a modest, ambitious, and enthusiastic amateur. By which you will please accept the term as meaning one who labors for the love of the art.



STUDY  
PAPER WORK

*Hiromu Kira*





STUDY  
RECTANGLES AND CURVES

*Hiromu Kira*



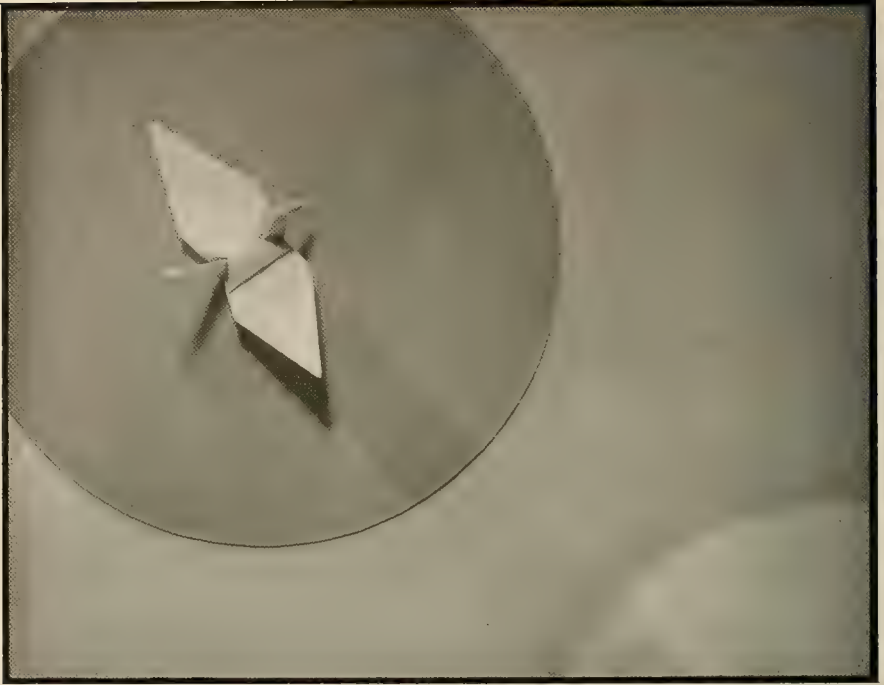
THE BUDDHIST PRIEST  
*Hiromu Kira*



THE PAPER BIRD ALIGHTS

*Hiromu Kira*





FIRST AWARD PRINT

*H. Kira*

JULY CAMERA CRAFT ADVANCED COMPETITION

## Still Life Photography

**By Hiromu Kira**

(Illustrated by the Author)

It seems to be the rule that the most of the amateur photographers start with the landscape pictures. I was not at all the exception to that rule. In the early days of my experience I devoted most of my attention to produce the pictures of the wide open fields. But lately, together with the fact that I have not much chance to go out of doors and that I can not be satisfied with those common landscape pictures, I ventured in another field, that of still life.

However, I do not mean to depreciate the landscape photography entirely, for example the outdoor of Mr. Alexander Keighly's Landscape or Mr. Leonard Missone's Mist Pictures or Mr. F. J. Mortimer's Seascape can not escape deep admiration of all lovers of art.

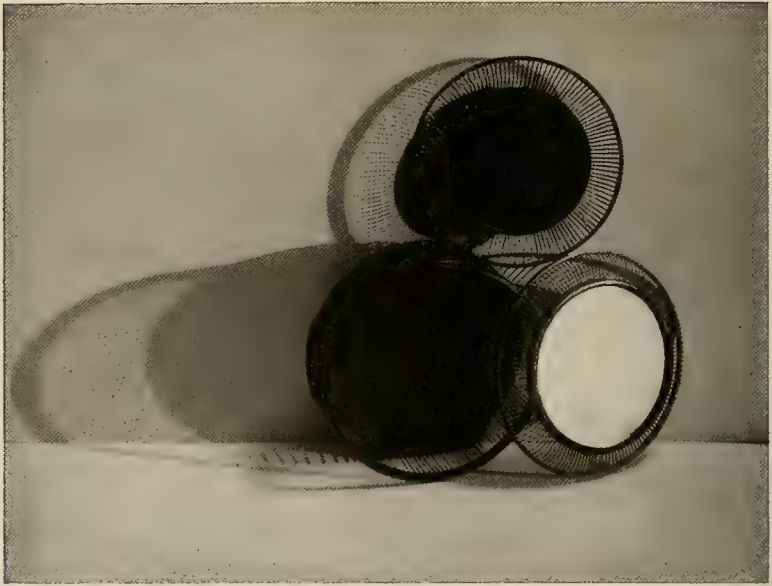
Since I have started the study of still life, I felt most keenly the importance of the fact that one must plan with great care the subject, arrangement, composition and lighting all by himself. This process accordingly takes much painful study, yet I find more pleasure and interest in such venture.

Practically every subject for still life which attracts one's attention has been handled by our seniors in various manners and most skillfully. Therefore one like myself with less experience, in order to produce worthwhile pictures, must choose his subject very thoughtfully, and study beforehand how to ar-

*The Expiring Paper Bird**Hiromu Kira*

range the subject, and how to effect the composition, lighting, lines and tone. With such preparation, when the camera is set, it is comparatively easy to succeed in making the desired pictures. Personally it is my custom to follow such steps, but once in a while I set my camera and work at the subject without any prearrangement.

The first result in my effort in still life photography is "An Arrangement." Since, I have been searching for some subject of unusual interest. Incidentally one day I saw a girl folding the Paper Cranes. I was much attracted by the unusual form of the lines, and decided to work at it. But it was not a trifling matter to learn in what arrangement this subject should be handled. Preferring the streetcar to automobile in the rush hours of morning and evening, I rode on the crowded streetcar, yet even while riding in the confusion and chaos, I did not waste a moment for trying to think out some idea for the subject. The few moments in the restaurant while waiting were used to that end. And after about a week's restless effort, came a simple idea to mind. That was to use three differently toned cardboards. A large cardboard was placed on the floor and two smaller ones on top of it in such arrangement as is seen in the reproduction, and the little paper bird was set on lastly. I set the camera facing downward and proceeded. What came out of it is the "Study—Paper Work."

*Shadow Filagree**Hiromu Kira*

It seems to be the tendency among many pictorialists to shun the use of the camera facing down. It is also surprising to learn that some think that only pictures of wide open fields have pictorial value. But I have quite a different view. It is natural for us to look up into the sky when we hear the sound of the propeller of an airplane, and to look down when we are on the top of a high mountain. In the same manner I believe that the camera may be used successfully either downward or upward as the occasion may demand.

I love immensity of the wide open fields. But I do not believe that the landscape and seascape are the only beauty and the one essential to our artistic life. In our every day life we come in contact with things which give us a feeling of beauty and things which give us the feeling quite contrary. Also sometimes we feel unusually deep inspiration. It should be a pleasure and might be the duty of us to find something that has universal appeal, something that inspires other than landscapes, and to stimulate people's interest in such art as is known as still life.

I hope it will not be forgotten and that it will be permitted me to say that naturally I have been much influenced by the simplicity and suggestiveness of the art of Japan. If this is not patriotic instinct, it is certainly inherent and instinctive.



# Photography in Science

By Professor Ingo W. D. Hackh

College of Physicians and Surgeons of San Francisco

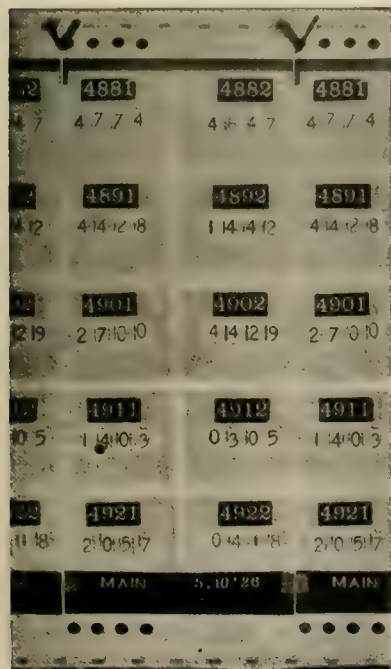
## V. IMPROVING THE WORLD'S WORK

**N**O INDUSTRY can progress without the use of scientific methods. As this truth becomes more and more understood, it causes the establishment of the research laboratories by single firms or by a combine of firms. The aim of these research laboratories is to find ways and means by which the quality of the product can be improved, the process simplified, new uses for the products and so on. Besides this work of development, the industrial process must be supervised so that the actual conditions existing at any time during the operation is accurately known. Such a control will enable the chemist or engineer not only to account for any unexpected results, but also to avoid critical or unfavorable conditions at a later time.

The introduction of the many valuable electrical recording devices and the many automatic mechanical meters into industry have helped to perfect this control. Lately, however, **photographic devices** have become of importance in science as well as in industry. Light is a frictionless operator and can be made to record with the greatest speed and accuracy. Photographic measuring devices offer an interesting field for amateurs and professionals with an inventive turn of mind for there are many fields in which they could be successfully applied and those seeking further information may find it in an interesting article on "Photography as a Recording Medium for Scientific Work," by G. E. Matthews and J. I. Crabtree in the "Journal of Chemical Education," January and February, 1927.

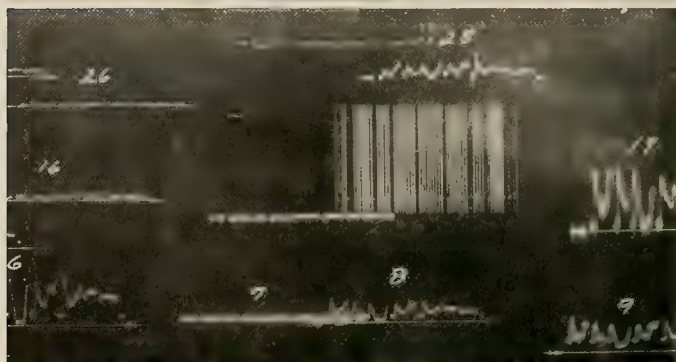
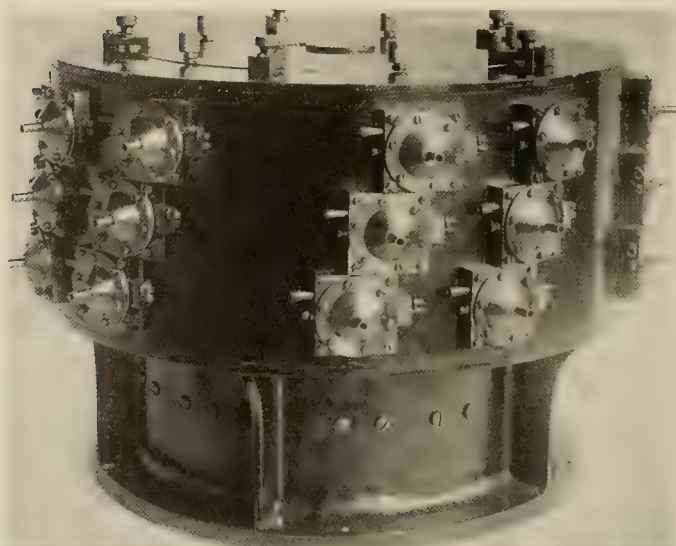
### The Factograph

The simplest photographic records are the pictures of other measuring devices. Thus the factograph takes automatic readings at any interval during the day or night of any number of gas meters, water meters, ampere or volt meters, or any other meter. It consists of a camera lens, focused upon any number of meters, a series of lights clustered around the lens which illuminate the meters during the exposure, and a moving film or roll of photographic paper which moves a definite distance after each exposure. The illustration shows ten such simultaneous readings between the marks indicated.



At left is shown a record of the Factograph Meter Reading

Courtesy Folmer Graflex Corporation



### THIRTY CAPSULE RECORDING MANOMETER

This instrument measures the atmospheric pressures at various heights in aeroplane flights. Its apparent complexity and scientific significance will give some idea of what the complete equipment of a modern long-distance flying aeroplane is.

The trained flyer, nowadays, needs a fairly good education in physics and scientific procedures.

Below: A record from the instrument shown.

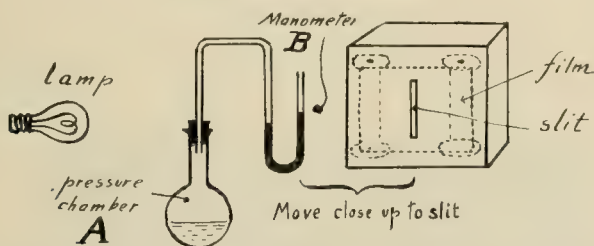
### The Photomanometer

Many chemical reactions and some physical processes can be best studied by recording slight changes in pressure. Before the application of the photographic assistant, a chemist had to chase his eyes from manometer to time piece to pencil and written record. With the photographic method he has automatic assistance, the accuracy of which he can trust.

Let us suppose the variations of pressure in the flask, A, are to be measured. A simple U-tube partly filled with colored water (for slight pressure variations) or mercury (for greater variations) is air-tight connected to the flask and is the manometer, B. Any change in pressure will cause a rise of the liquid in one arm of the U-tube with a corresponding fall in the other. Placing one arm of the tube against a slit, behind which is a drum or roll of films, completes the device. Any variations in the heights of the liquid will be recorded on the film or paper which moves at a definite rate either driven by watch-work and weight or electrical motor.

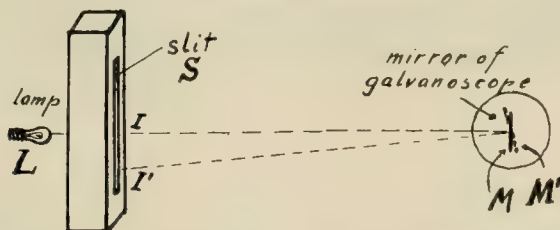
The width of the slit, the speed of the moving film, and the intensity of the artificial illumination are the three factors to be considered in adapting this instrument to a number of new conditions.

### A Capsule Manometer



The extent to which photographic methods can be developed is shown in an instrument called the "thirty capsule recording manometer," devised by the Langley Memorial Aeronautical Laboratory, Langley Field, in Hampton, Virginia. This instrument is used to study the air pressure exerted on different parts of an airplane wing. A hole is drilled at the point chosen for measurement and a rubber tube inserted which is then connected with one of the capsules containing a thin metal diaphragm. A mirror is mounted on the diaphragm and its bulging, due to pressure, is recorded on a moving film. Thirty records are made simultaneously.

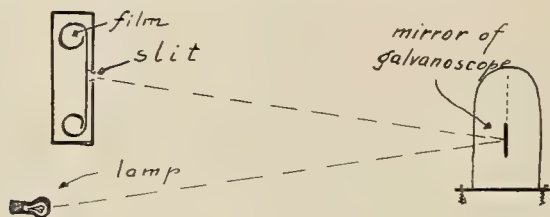
### The Photogalvanograph



The galvanometer is one of the most useful measuring instruments known to science, for it detects minute electric currents and is used to study radioactive substances, slight temperature changes, nerve stimuli and the brightness of stars. A galvanometer is based upon the fact that a wire conveying an electric current is surrounded by a magnetic field, hence, if it is placed over a compass needle, the needle will set itself at right angles to the direction of

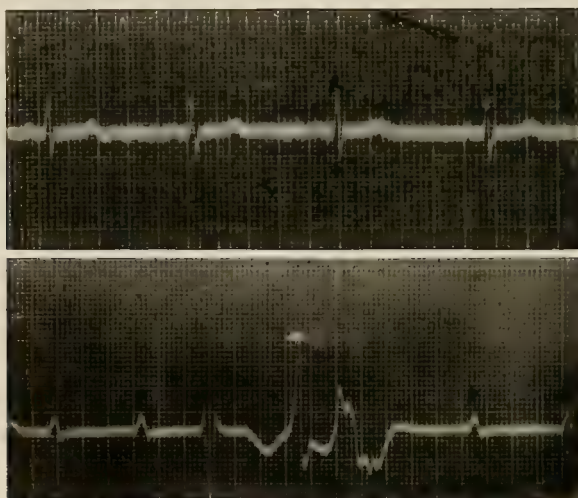


the current. From this principle have developed a number of measuring devices in which either a magnet is suspended in a coil, or a coil is suspended between the poles of a magnet. In either case a small mirror mounted on the suspending wire is rotated by a feeble electric current.



The slightest movement of the mirror can be magnified to any desired degree by the simple arrangement shown in the figure. Let  $M'$  be the position of the mirror at rest,  $M''$  the displacement caused by a feeble electric impulse,  $L$  an electric lamp, and  $S$  a measuring scale. Then the image  $I'$  will be seen to travel to  $I''$ . The greater the distance of the scale from the mirror, the smaller the point of light, the greater becomes the accuracy of the reading.

If we now substitute the scale for a slit behind which a photographic film or paper moves, we have an automatic recording photogalvanograph by which the smallest variations in current during any specified period of time can be recorded and measured.



Electrocardiogram showing normal (above) and abnormal (below) heart beats, recorded by Photogalvanograph. Courtesy Dr. J. J. Finnigan.

This device has been successfully used in counting the alpha-particles shot off from radioactive substances, in chemical analysis to measure the changes of electric conductivity of solutions, in astronomy to determine the brightness of stars by connecting the galvanometer with a selenium cell, or the temperature by connecting it with a thermocouple.

Another variation of the device is to use a sensitive ammeter, or galvanometer constructed with a moving pointer instead of a moving mirror. Placing behind the pointer a slit with the moving film or paper, any variations are shown as the shadow band of the pointer. An example of this type is the

electro-cardiograph recording the heart beat. An electric impulse is created by the heart beat which causes a contraction of the muscle of the heart, and this very fine electric current is detected and recorded by the pointer of the galvanometer.

### The Photothermograph

The galvanograph arrangement is also useful in detecting small changes of temperature. A thermocouple transforms the temperature changes into a feeble current and this current is recorded either by the reflecting or pointer galvanometer. Such automatic records are useful not only in industrial work but also in meteorological, astronomical and chemical investigations.

### The Nephelograph

A nephelometer is an instrument used to determine the turbidity of a solution or the density of a haze, smoke or fog. A tube or square cell having on one wall an electric light, on the opposite wall a slit with the photographic film or plate moving behind it, is the nephelograph, for any liquid passing through it will automatically record its turbidity on the film or paper.

The Wattles Stoking Register is an adaptation of this principle to industry. It consists of a source of light on one side of a chimney and a photographic film behind a slit on the opposite side. The smoke cuts off the light in proportion to its volume.

## A Reflex Back for Your Kodak

By Edward Hathaway

(Illustrated by the Author)

A reflex of this design is so easily constructed that one may easily build his own.

The shutter is fool proof, it being impossible to expose the plate except by pressing the release, and the speed is only limited by the strength of your construction.

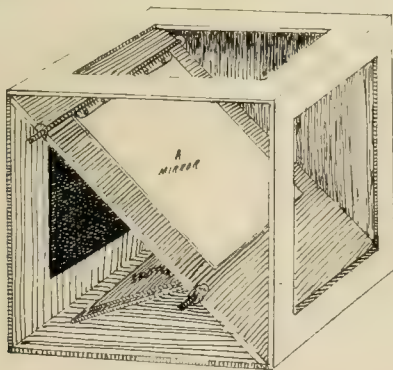


Figure 1

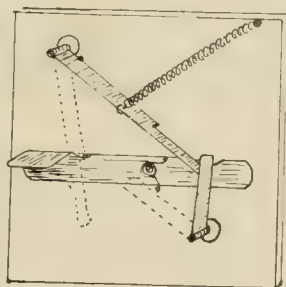


Figure 2

Figs. 1 and 2 leave little to be explained. Little refinements will suggest themselves to those of a mechanical turn. For instance, a watch spring in a ratched barrel, the projecting post of the mirror hinge replacing the arbor. This would allow nice adjustments of speed.

However, a back built as shown in drawings will work surprisingly well.

Fig. 1 shows a box with openings on three sides. A board is placed diagonally (45 degrees) in the box, and an opening cut in it large enough to allow a clear opening from front to back.

The mirror is mounted on a thin piece of wood, rabbited to fit smoothly into the hole, leaving a narrow flange on three sides.

The shutter should also be made of thin wood, rabbited three sides. The hinges consist of pieces of 22 calibre brass raw rod, long enough to reach across and project  $\frac{1}{2}$  in. beyond the outer surface of your box. Slots should be sawed in one end of each,  $\frac{3}{8}$  in. deep. But one bearing to prevent end shake, is needed, for this purpose a copper rivet washer is driven on and soldered where needed.

Bearings at the ends of the hinges should be of metal, to allow free movement.

After mirror and shutter are mounted and hinged in position, a strip of light proof cloth or leather should be glued to mirror mount and stationary board, leaving a little slack over the hinges. The shutter hinge should be covered the same way.

The shutter hinge should be free, working enough that it will fall back of its own weight, when released.

The entire inside, especially the shutter, should be painted with dead black paint, absolutely without luster. Thin shellac that is rich in lamp black will do.

It is better to fit pieces of board into the ends of the space occupied by the shutter, before putting on the outside of your box. In building the box, rabbit all joints.

Fig. 2. The control arms of both mirror and shutter should be good stiff spring brass, and after dropping a washer over each post, should be placed in the slots you have sawed in the ends of the posts, and soldered.

Engage the shutter control arm and hold it until the mirror control arm is drawn back until the act of its catching releases the shutter allowing it to fall open. Thus, no light enters as shutter is being set.

An excellent spring may be made—for low speed—from a violin A string wound on a  $\frac{1}{8}$  in. mandril.

Fitting your camera to this back, the hood, the adapter for your film or plate, are your own problems. I would suggest, however, Graflex Plate holder or film pack adapter, they being the easiest fitted.

For a hood, I use an old  $2\frac{1}{2} \times 3\frac{1}{4}$  Premo, with two spectacle lenses, concave slides together, fitted into the lens board.

#### SUMMUM FINITUM

By SIGISMUND BLUMANN

*To live, to love, and not to learn too much of men,  
To share the sunlight with one's kind, and when  
The shadows fall to touch a helping hand:  
To laugh at one's own pain and weep  
When others tell their woes, and then to sleep.*

*There is a place for each upon the land;  
Even though failure our content beguile,  
Let us mock adverse fate, yea, with a smile,  
And with each living, striving, longing breath  
Absolve the soul and pass it on to Death.*

*When all is told we are so very small,  
For all the deeds our puny kinds extol;  
Body and mind, soul, action, thought and all  
That we should smile, indulgently, at self  
Kiss this poor earth and let the planets roll.*



# Third Dimension Photography and the Motion Picture Industry

By John McCormick

*John McCormick has been with National Pictures so long that he is somehow accepted as the Al in National. He is one of the youngest men in his capacity as director of productions.*



*Young in years, old in experience, and with the perspicacity of the ages in ability. Those who know him best say he is as human and companionable a fellow as one might meet in a lifetime, which is an added good quality any time, anywhere, but especially commendable in the peculiar position he occupies.*

*Our knowledge of Colleen Moore is limited to the pictures in which we have seen her. We hold a vague memory of a pre-vision of one production run for us as one of a convention of photographers in Portland some years ago. The play was called "The Lost Pajamas" and it was rolled off after the regular show and without music. The time was around midnight. We were a tired crowd, and as the drone of the projectors permeated our souls many of us were so ungallant and ungrateful as to fall asleep. I was one of the sleepers. But the last thing I saw was a very beautiful girl billed as Colleen Moore throwing pillows. Who lost the pajamas and if they were ever found deponent knows not.*

*Should there be one reader in the thousands who does not know the charming little lady, this will introduce you to her. And John McCormick as the executive of National Productions sees her every day, IN PERSON. Which explains his boasted jollity. Lucky John.*

*The text which follows, coming from so eminent an authority, should do much to revive the languished art of stereoscopy. The illustrations are from the motion picture "Lilac Time" in which Miss Moore stars. They are carefully made and will fit your stereoscope.—S. B.*

Still pictures—so-called in the studio parlance to differentiate from the motion pictures and being the recording of the scenes by a single lens camera—have played an increasingly important part in the distribution and advertising division of the motion picture industry.

It is through photographs of this nature, reproducing the scenes of the picture, that salesmen are able to acquaint the theater owners with the type and quality of a forthcoming production, and it is through these same photographs published in magazines and newspapers, displayed in lobbies or appearing in lithographs and other advertising paper, that the theater-going public is informed of the sort of entertainment offered in a particular screen production.

Consequently, it is necessary to have photographs that present graphically the highlights of what will be shown on the screen. From the standpoint of the theater owner this is particularly important. Due to the fact that a picture is released soon after it is completed, it must be sold while still in production, and in deciding whether or not to buy a particular picture the theater owner is guided largely by the still pictures he is shown. Naturally, the star, the director, scenarist, cast and producing company influence his decision as well.

Through the employment of "third dimension photography," which includes the Stereoscopic Vision of objects in relief and solidity, it is possible



COLLEEN MOORE

*As she appeared in  
"Lilac Time"*

*Portrait by  
Henry Freulich*

to give the buyer of pictures glimpses of the forthcoming production that are as far ahead of ordinary photographs as the modern motion picture is ahead of the flickering "jumping photos" of fifteen years ago.

Third Dimension Photography is the science of the action of light upon sensitive bodies through twin lenses in producing pictures; heretofore, the recording process has been confined to single lens cameras. Science has discovered, and more recently modernized, that by having a double lens camera arranged with the similarity of human eyes, it becomes possible to record the scenes just as they are in reality. Each lens in the camera is set to register the objects from a relative angle and when exposed to the light, each respective picture is recorded upon the negative distinct from the other. To bring about the binocular single vision upon these two independent flat pictures, it is necessary to employ the "Stereoscopic Vision" or Binocular single vision



SCENE FROM "LILAC TIME"

Refugees hurrying from the danger zone with their household goods and personal treasures

and this is done with the aid of an optical instrument whereby the vision is properly fused and the eyes are focused to the right range and level.

The full angle in the sight is concentrated and confined to the proper relationship, thus allowing the eyes to grasp the natural solidity, position and relation in the illuminating qualities of the physical properties, as they appear in reality.

Anxious to provide the highest quality of still pictures for First National's distributing organization, I decided upon Third Dimension pictures for the purpose. Complete Indupor Third Dimension camera equipment was secured for our still photographer, as well as a number of the usual optical recorders. Numerous scenes of interest were photographed in this way during the film-



SCENE FROM "LILAC TIME"

After parting from Philip, Jeannine wanders about distracted, expecting to find him anywhere





SCENE FROM "LILAC TIME"

Jeannine treasures the hope that Philip still lives and is ever on the search for him

ing of "Lilac Time," then sent to the salesmen, who were able to show exhibitors remarkably realistic views of the production.

In attempting to represent in still photographs what is seen on the screen, the photographer is at a distinct disadvantage. That sense of depth, which can be suggested with ease through the appearance of moving figures on a screen, must be laboriously achieved by deft lighting and placing of subjects with the common type of still camera. For the Indupor Third Dimension camera, however, no elaborate preparations were made, for the stereo camera sees a given scene exactly as it affects the human senses.

Consequently, the photographing of scenes with the twin lenses gave remarkably realistic pictures without the loss of time necessary for the changing of lights—and time is tremendously valuable during the production of



COLLEEN MOORE AND GEORGE FITZMAURICE

motion pictures. Such cameras have an added advantage when equipped with an exceedingly fast set of lenses, which makes it possible to make exposures during the actual filming of a scene.

"Lilac Time" was filmed largely out-of-doors in settings of unusual perspective depth. A large aviation field, representing the headquarters of a British air squadron during the war, was one of the principal locales of this picture, and a flat surface offered little opportunity to suggest the really great depth of the setting. With the conventional still camera, the expanse of this field would have been reduced to a small area, but through the third dimension process it was able to reproduce the actuality and immensity of the size of this field.

As the result, still photographs of "Lilac Time" suffered little by comparison with the scenes appearing on the screen, and the distributing organization found this visual evidence of the quality of the production exceptionally valuable.

My experience with this improved form of still photography on "Lilac Time," Colleen Moore's new aviation picture, has convinced me that stereophotography has been revived to stay, and that its eventual adoption for motion picture photography and projection is certain. The stereoscopic vision principle is sound and in view of the continual technical progress of motion pictures in achieving greater and greater realism, I look for the day when third dimension photography will be universally adapted and adopted for screen use.

## CAMERA

By ALICE LAWRY GOULD

*Each year, new marvels manifold  
Supplant the wonders past years saw;  
And still upon this little box  
I look with awe.*

*The laughing child that cannot choose  
But grow so swiftly to a man  
It will reveal unchangingly  
As Peter Pan.*

*The perfect day we cannot hold,  
The sweet wild flowers in the grass—  
This fairy favor keeps intact:  
They will not pass.*

*The scenes we love and yet must leave,  
The friends we may not see again—  
As in our hearts, so to our eyes  
They will remain.*

*If this small magic instrument  
Can so defy a stubborn fate  
And snatch from time these semblances  
Inviolable,*

*Then it is natural to think,  
As think we must, and think we do—  
That by God's camera, we are  
Immortal, too.*

# Astronomical Photography

By J. F. Chappell

Lick Observatory, Mount Hamilton

(Concluded in this issue)

But even on these three counts the photographic method is only under complaint and improvement, it is not cast out. Almost every astronomer is today by necessity also a photographer. This is becoming more and more apparent, and doubtless in the early future more of an academic requirement in photography will be established in connection with astronomy courses in the universities. Up to the present, facility along photographic lines was likely to be acquired, if at all, only by chance and amateurish experiment.

Routine photographic work in astronomy includes the making of copies or enlargements for study and measurement, handling plates, and film from automatic instruments such as the intensity curves from the Moll microphotometer. It also includes copies of drawings and photographs for the press, and for lantern slides to promote that great interchange not only between astronomer and student, and astronomer and the public, but also between astronomer and astronomer that is so necessary to the alert progress of the science.

Simple copying by photography is an especial need in the practice of astronomy, for many plates taken at rare moments of some eclipse, occultation, or opposition, are irreplaceable and of fabulous worth: the originals must be subjected to no risk of loss or breakage.

An excellent method in handling the plates is most important; take for example a spectrum: if by skillful enlargement or printing a single line may be brought out from the negative, the existence of the corresponding substance may be proven, and facts of intensity, temperature and speed of the star will rest on the validity of reproduction.

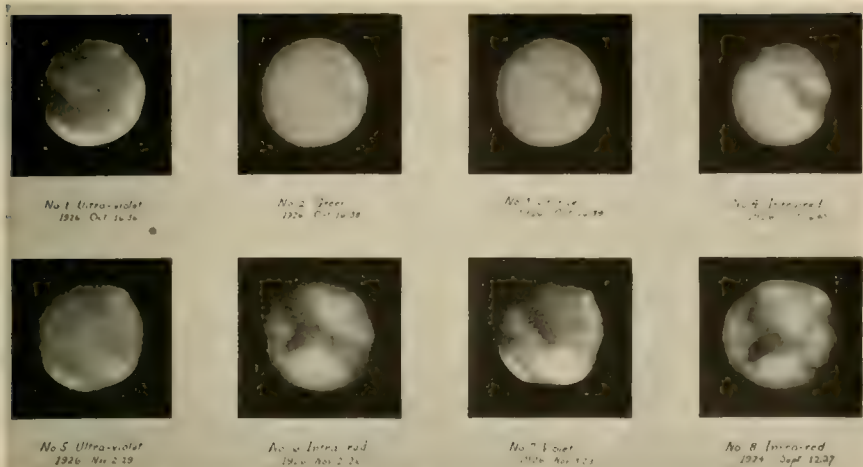
An obvious service to astronomy by photography is the spread of



HALLEY'S COMET, MAY 6TH, 1910



## CAMERA CRAFT



### PHOTOGRAPHS OF MARS BY LIGHT OF DIFFERENT COLORS

The change in appearance of the images photographed by the different colors of light is very marked. Those made by violet and ultra-violet light are believed to show only the planet's atmosphere, while the infra-red ones, in general, reveal its solid surface. Note change in clouds and general condition of atmosphere between 5 and 7 which were made on successive nights. Compare 6 with 8 for changes in appearance of the solid surface which occurred in a period of about two years.

*Photographs by W. H. Wright.*

popular knowledge of the subject. Attractive pictures of spiral nebula, tailed comets, the strange rings of *Saturn*, do much to stimulate wholesome curiosity of the public. Newspapers are now carrying weekly features of this sort, and the fine photographs are stirring a broader interest in the subject, and hence supporting a rapid progress in further research.

The two main types of telescopes, reflecting and refracting, are used for photographic work and little can be said of one in preference to the other. Both types are used to advantage for different classes of work. Refractors tend to waste light which is absorbed by the heavy lenses, and a lens figured for visual observation will focus only in the yellow region of the spectrum, rendering it useless for photographic purposes unless a correcting lens or yellow sensitive plates and filter are used. The refracting telescope, however, is more rigid and manageable, and less sensitive to slight strains. The mirror of the reflecting telescope collects the light throughout the entire range of the spectrum from ultra-violet to infra-red and brings the rays all to a focus at the same point. This very valuable feature permits the use of color sensitive emulsions and filters of any color. While color sensitive materials have been manufactured and on the market for a long time, it was only in the last three or four years that they have been applied to any extent in astronomy. Almost their first practical use, and certainly the most important results obtained by their use was in 1924 when Prof. Wright of the Lick Observatory made photographs of *Mars* at its opposition of that year, using light of several different colors, and published the remarkable difference in the images made by the different colors of light. The great importance of this work cannot be fully realized until the plates made in that and

*The Pleiades**Heavens Gems*

Courtesy of Lick Observatory

succeeding years are more carefully studied and measured, but it undoubtedly marks the beginning of another epoch in astronomy due to the progress of photography.

The future doubtless will bring direct improvements and inventions photographically conceived, and attack of the new methods will be more and more from a photographic standpoint, whereas in the past visual equipment has been built and supplemented with many photographic revisions and adaptations.

Whatever service photography has given to astronomy, it has gained in improving reflex. Advances chemically and in manufacture of plates, lenses, and other equipment are due in part to the reaching out into the problems of astronomy. In a recent lecture Dr. Aitken said "The fact is that all of the physical sciences are so closely related that it is impossible to make advances in the one without corresponding advances in the others."

Photography serves well in promoting several of the major sciences, but in no other realm does it reach the sublime and mysterious heights that it does when the camera is pointed to the sky. Astronomy is the oldest of sciences. It is the study to which man's mind turns in maturity, and which peoples or nations seek in the ripeness of development. It has been said that to measure the intellect of a people one must note their interest and advance in the subject of astronomy. Therefore the exalted place to which photography is being raised in astronomy is a place of honor, and the future must bring forth to the service of this science men

wise beyond the wisdom of today in photographic devices. There must come men who can spin worlds and suns upon the surfaces of plates with a skill matching in some degree the new power that is being placed in their hands.

FOOT NOTES

1. Russell-Dugan-Stewart, *Astronomy*, Vol. 2, p. 480.
2. Aitken, *A. S. P.* Leaflet No. 6, May 25, 1926.
3. Clerke, *System of the Stars*, 2nd Ed. p. 23.
4. *Ibid*, p. 28.
5. Adams, *A. S. P.* Vol. 39, No. 230, p. 192.
6. Russell-Dugan-Stewart, *Astronomy*, Vol. 1, p. 181.
7. *Ibid*, p. 181.
8. *Ibid*, p. 337.
9. *Ibid*, Vol. 12, p. 88.
10. Clerke, *System of the Stars*, 2nd Ed., p. 219.
11. *Ibid*, p. 95.
12. *The Observatory*, Vol. 50, No. 640, p. 277.
13. Clerke, *System of the Stars*, 2nd Ed., p. 270.
14. Aitken, *Binary Stars*, p. 63.
15. Clerke, *System of the Stars*, 2nd Ed., p. 30.
16. Russell-Dugan-Stewart, *Astronomy*, Vol. 1, p. 337.
17. Clerke, *System of the Stars*, 2nd Ed., p. 50.

Note

It is a pleasure to credit the late Carl A. Bergman with the winter view of Mount Hamilton printed with this article, and to name James Edward Keeler for some of the earlier exposures of Nebula, and Dr. J. H. Moore for the Polaris spectrogram on page 267. It should also be noted that by an obvious typographical error captions of the two plates on page 269 of the June issue were confused so that not only the titles must be reversed to identify the cuts, but the explanatory sentences should be stricken out, being misleading, as both refer to the right hand photograph, the cluster.

## “Sheriffing” With a Camera

By Leslie T. White

The sheriff of today has laid aside his chapps and pony and uses instead a sleek high-powered car. He has to keep abreast with times in order to keep up with the criminal, who, by the way, is getting more scientific. So today in every sheriff's office of any size you find the identification expert and the photographer. More than likely the two are combined and handled by the one man.

His duties are many and varied, and thrills come in rapid succession. His day may run like this . . . first thing he will bring in all prisoners arrested the previous day . . . “mug” (photograph) and finger-print them all. Probably in the middle of doing that he will be called away to photograph the finger prints on a safe that has been blown. Just as he gets back, the negatives nicely in the “soup,” a call . . . an accident. He rushes across the county . . . shoots the pictures that will be needed in



court and hurries back to the office again. In the meantime the coroner has picked up an unknown victim and wants a picture taken in order to try and locate friends or relations . . . so to the morgue . . . more shots.

Everything developed and printed . . . he wends his weary way homeward (with luck). He snuggles down in his little bed to sleep? Ah . . . no . . . . a picture must be taken in the next town! A murder has been committed! He wonders as he rushes over there why people haven't the grace to be murdered in the day-time and considers the possibility of a union for sheriff's photographers, insisting on an eight-hour day. He finds, possibly, on his arrival, that the body is lying in an alley. He drives the big car up and makes his exposure by the headlights on the car. So, to bed again.

"Mugging" the men is interesting if one likes to study types and human nature. There is the young "shiek" who wants to know if you can't slip him an extra print to give to his "skoit" . . . the old hobo that never had his "pitcher took" and wonders how it will look. The poor chap that has made his first mistake and hates to go down on the police record. . . Then occasionally you have a sullen brute who wants to wreck the camera and the photographer together. He probably is wanted badly somewhere and realizes what will happen when his picture is sent to the main bureau. They all pass before the little camera with their varying moods.

Two shots are taken, usually. A front and a profile . . . both are bust shots. The pictures have to be extremely sharp, so as to show every mark on the face. The lighting must be such as to give no shadows. Ordinarily four pictures are taken on a five by seven plate. That is two men to a plate.

Photographing the finger prints is a harder proposition. When first you look for them they are almost invisible, but by dusting a fine powder on the spot where you suspect they exist, you can bring them up. The powder used varies with the surface of the object. The main idea is to obtain contrast. If you were looking for prints on a black enameled safe, an aluminum powder would be best. Then by using an artificial light in such a way as to obtain reflection from the powder you can obtain a better photograph than the eye can see . . . This is very fascinating but requires a lot of practice.

In accident pictures several shots are needed in order to show the direction, any obstacles that might have obstructed vision, damage done, and location pictures.

Mugging at the morgue has one advantage . . . you need not worry about movement. Pictures of autopsies are very unpleasant and need not be taken up here.

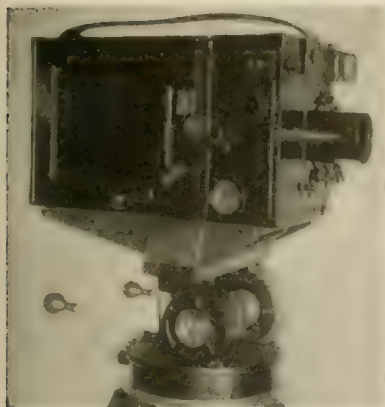
After all is said, however, it still remains one of the most fascinating branches of photography. Ah . . . yes . . . sheriffing with a camera is a great life . . . . if you don't weaken.

# Camera Work of Moving Pictures For the Amateur and Professional

By Ernest M. Reynolds

Illustrated by the Author

(Continued from our July Issue)



A Professional Type used where portability is required.

## MASKS, VISIONS AND DOUBLE EXPOSURES

The various photographic effects produced by use of vignettes or masks is a matter of no small importance. The essential feature lies in the knowledge of using the proper mask in the proper place. Needless to say, many productions have too much vignetting which means little or nothing to the advancement of the art. On the contrary, just as much thought and judgment may be exercised in the choice and place of using as in the weaving of continuity.

The larger the supply of masks, naturally the greater is the scope of effects. In this event it is up to enterprising photographers to work out a goodly supply of these little helpers. Masks are not only used for the purpose of lending a finished touch to the scene, but also for visionary and multiple exposure work. There is probably no better example along this line than in the production of a character playing a dual role. The most common way is to use two masks with parallel and perpendicular edges in a mask box. In the majority of instances this will produce a hazy effect straight up and down in the scene. A remedy for this probably will be found in cutting the matched edges in the form of a compound curve, this causing no visible line upon the screen; at any rate, it will break the line from being straight and is not so easily detected. There are two positions or methods of placing masks. One is internally or between the lens and aperture, about five-sixteenths of an inch in front of the film. This has been found by experiment to produce the diffused effect. A second method is the use of a mask box mounted upon the outside of the camera, and approximately four inches in front of the lens. This distance may be varied to nearly any length according to the requirements of diffusion. In using internal vignettes the demands are most always that they be made of metal. This means more expense in time and material. Cameras equipped to mask in this manner generally have a fair supply of common designs, but it is strongly recommended that the special mask, made probably for the use of a very few types of scenes, be cut from thin black fiber or cardboard and used in a mask box.

Practically all visionary effects are produced by the use of masks in one way or another. Take, for example, the simplest form of visionary picture making, that of a dream pictured in one of the upper corners of the main picture. Let us say that the dreamer sits before a fireplace. It is quite natural to have the upper regions of the picture quite dark or at least well in the

shadows. It is in this upper space which is less lighted that the vision effect is placed. To produce the completed picture just described, it is first necessary to film the dreamer at the fireside, then rewind film in camera to starting point. It is quite common to have the vision take up about one-quarter of the screen or even less. It is now that the vision part is made. After a suitable location or scene is found and mask adjusted in such a manner as to shut out all of aperture except the corner at which vision will appear, the scene may be photographed in the usual manner. If it is decided that the vision should be in the scene from the beginning, the second exposure may begin immediately;



A Standard Guage Printer used in Making Positives

but if it should appear later on the lens must be covered or shutter closed. At the point in former scene of dreamer, when the vision should appear, according to footage, uncover lens or open shutter and continue cranking camera; this will photograph the second exposure into the first scene and if properly masked will make the vision of the dreamer. The foregoing is an example worked out ordinarily in a studio with artificial lighting. Although there are many other ways, the same general idea may be produced in the exterior if care is taken to see that the spot which contains the vision is heavily shaded so as to be effected by the second exposure. Great care should always be taken in the placing of masks as this is the secret to successful results. We will now digress for a moment and take up a few facts which are less complicated and likewise easier to grasp. Trick work is a subject requiring a great deal of study and above all constant practice, especially in its minor forms. The following description, if used in one way or another, will enhance the product of an ambitious cameraman.

Let us keep in mind that in the external system of masking, two different principles are to be had, namely, the movable and the stationary designs. An example of the movable mask is the common "circle," which is gradually opened or closed, actuated upon the iris principle. An important feature worthy of note in connection with the iris, is that the design should be capable of opening or closing at any given point on the screen. At its maximum opening the aperture in the camera should be left with a clear field. There are many movable masks with varied designs, such as the square opening and closing, also the curtain effect which raises and lowers or parts vertically. It is very obvious that the use of these movable masks will always lend more action to the scene in question.



## CAMERA CRAFT



The Positive Printer from top showing negative and raw positive before placing in gate or film advance

The other class of vignettes is of a stationary type. In other words, these masks have no action during the entire scene for which they are used. Strange as it may seem these were the slowest to develop into the cinematographic field. One of the latest effects has been the "spot-light" illusion. The most common way to produce this result is with the use of colored celluloid or gelatin. The gelatin made for spotlight colors will produce very satisfactory results, the trade name for the particular color used being "straw." A piece is cut just large enough to slip into the mask box. The center of mask is determined and a hole cut, the size depending upon the area wished to be covered by the "spotlight" upon the screen.

An effect often used especially in close-up work, is the soft focus. Probably no other late development of the photographic art has been given more space in literature, or study by artists in the work, than that of the soft focus and the ways and means by which it may be produced. Soft focus may be described as an effect which softens all sharp lines of definition and brings the whole picture into a realm of partial indistinctness. This softening of focus is most effectively obtained by the use of a specially designed lens for soft focus work. Another very effective means is by placing black gauze over the lens, or better still, by inserting a mask form covered with gauze in the mask box. For the benefit of those who are still in doubt as to just what is meant by gauze here is a suggestion. The writer has had very good results using thin black georgette. Naturally, when using this method the reduction of the exposure is quite marked. To compensate for this fact either a larger iris opening must be used or in case of artificial lighting an increase in quantity of light. It is always advisable to focus without the gauze in position.

## MOTION PICTURES AND HOME LIFE

The day is past in which the Cinema is a thing of public amusement. The Motion Picture Camera is a home institution. It is the wherewith of living family history. The baby never outgrows its first charm and grandparents shall see themselves as they toddled, not inanimately depicted, but toddling. —S. B.

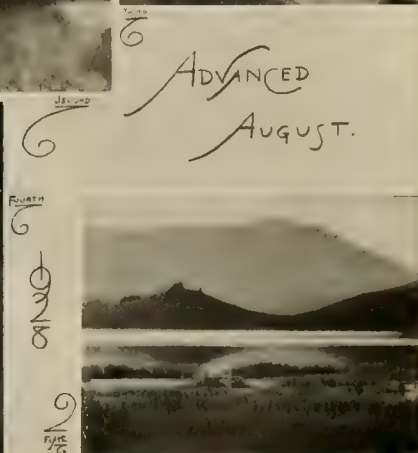
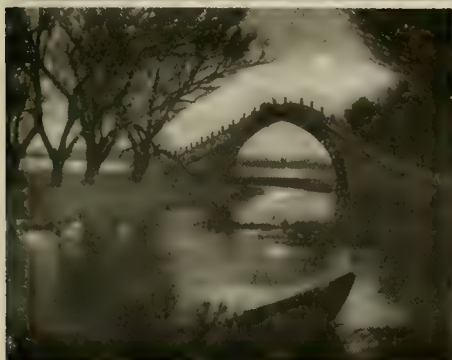
## CAMERA CRAFT



FIRST AWARD:

*Dr. Max Thorek*

# CAMERA CRAFT



ADVANCED  
AUGUST.

SECOND AWARD: *H. S. Kaito*  
FOURTH AWARD: *E. A. Nievera*

THIRD AWARD: *K. Kojimoto*  
FIFTH AWARD: *Miss A. Lavenson*

## AUGUST 1928 COMPETITION

### Advanced Pictorial

Dr. F. Adelbert  
Ernest Aftgut  
E. Alenius  
G. Bertelli  
Miss S. Bonn  
Mrs. Inman Collopy  
Dr. Albert Creiz  
Henry Dittmyer  
P. Eigeman  
T. Furuya  
Michael Graney  
Anton Gregorvitz  
Adolph Gutman

Isidor Heilman  
Rudolph Hiller  
K. Inouye  
J. T. Itsui  
Dr. M. Jenson  
H. S. Kaito  
K. Kojimoto  
Miss Alma R. Lavenson  
J. O. McCauley  
Jose Ig. de Miranda  
E. A. Nievera  
M. A. Obremski  
Dr. Matthias Olman

V. Castilla Oramas  
Y. Osada  
Fr. Pfennigbauer  
O. Remsen  
F. Rogers  
Dr. Max Thorek  
Henry Ullman  
Dr. Fritz Undauf  
H. L. Voelker  
W. A. Watson  
Otto Weil  
I. M. Welland  
Mrs. V. L. Younger





FIRST AWARD:

*T. K. Tsukane*

# CAMERA CRAFT



SECOND  
AMATEUR



THIRD



FOURTH  
6  
AUGUST  
1928  
2  
FIFTH



SECOND AWARD: *G. Allen Fraser*

FOURTH AWARD: *O. W. Conrath*

THIRD AWARD: *Mrs. W. F. Eldridge*

FIFTH AWARD: *Mrs. A. P. Hollis*

## AUGUST 1928 COMPETITION

### Amateur Pictorial

Mrs. V. S. Ames  
O. Andresen  
Howard Atwood  
Anselmo Avedan  
Adelbert Bady  
Frederic Blake  
Harry Carey  
Miss Phillipa Charlton  
A. W. Clark  
O. W. Conrath  
W. O. Cooper  
Mrs. Margaret Dean  
Mrs. W. F. Eldridge  
P. Y. Empaynado

N. H. Foster  
Jose Villalobos Franco  
Allen Fraser  
Frederick Goerner  
Dr. H. P. Gorman  
H. Y. Hara  
Charles A. Harris  
Mrs. A. P. Hollis  
Miss Josephine Isman  
I. Katishi  
Miss M. E. Kaufman  
Miss Thelma Lafferty  
D. Meacham  
Mrs. E. B. Meyer

Miss J. Nevers  
Vincenzo Orlando  
Knut Palin  
Rene L. P. Raoul  
Miss Sara A. Sandt  
C. B. Shattuck  
Harry G. Tienken  
T. K. Tsukane  
Mrs. F. J. Upton  
Miss Louise West  
L. A. Whitford  
Frank Yelland  
Sr. G. Zambrezzi



### Mother's Day

Is Mother's Day a purely American institution? If so, it should be adopted all over the world. The praises of mother shall not be reduced to sterile language here and now. Just a few thoughts that came to us on the last occasion and which we have withheld till they might ripen.

To the young: Make much of anything and everything that hallows the name and the person and all that pertains to mother. In the slightest that you neglect her you are investing a present deed in a compound interest of regret.

To the old: As reverence and love be accorded you for your age and your parenthood, earn it, deserve it. Set an example of remembering the long gone mother that your child may grow into the spirit and the nature of remembering. A white carnation or rose is too easily bought and given to mean enough. Put your heart among the petals, your soul into the calyx.



### What Photography Can Do

The above is a flashlight of a symphony concert which we happen to have attended. When the flash went off we thought how palpably inadequate the single, short light was, in that vast auditorium. We laughed inwardly at the hopeless under-exposure that should result. But Morton and Company do not make mistakes. The resultant picture is perfect. Photographic materials and skill have certainly advanced to a wonderful point.

### Twixt You and Me: Mizpah

It has been some time since I have acknowledged in this general way the many kindnesses of readers who have written their approbation, and the less kind but often more generously couched criticisms, sometimes of such as have an occult faculty of condemning without reading.

It is conceivable that a writer may be as sincerely, and in my case as justly disliked as liked. Why not? We all have preferences and I am so decided a personality,



## CAMERA CRAFT

thank God, as to leave no moderation in personal preferences. My egotism seems to have been fastened upon me by so many persons spread over the world who insist that I am worthy of being very much liked or very decidedly disliked.

This is from the heart to the heart. May it reach its mark.

My striving has been all one way: To earn your kindest feelings. Even to the six or seven individuals who in the past five years have disapproved of me in unmeasured language or words in no language at all, this message goes in all sincerity.

To one who asserts he shall never read Camera Craft till another editor take my place, no less than to the over-favorably prejudiced friend who reads the magazine only for what he can find of mine, I would say that too much stress is being put upon the editor.

Think of the number of fine writers, men who know their subject and how to tell about it, who write for us. Think of the fine pictures brought to you from the far corners of the earth. Think of the really good verses by poets who deserve your passing them up in silence and with regret at your own lack if you cannot enjoy poetry. Think how small a place I take on the pages of this publication and of how small an importance I am as compared to the rest.

A man is what and as he is or he is nothing. If he have character he may dissemble or pretend to be different or characterless. With no character at all he happily may offend none, but would you have even your defective editor a dissembler or a negative personality?

Now you, dear reader, are a fearsome entity made of thousands. Eight, nine, or more thousands of you reading these pages each month. All with one object: to be pleased or displeased. But with thousands of individual tastes. Your opinion is thus diversely formed in a thousand ways, which is your aggregate privilege, and I must abide by but two decisions—the matter is good, the matter is rotten. Which is my fate? Do you see the point?

Put differently, you have a tangible something to decide upon whilst I must try to please a thousand shades of tastes and earn a thousand nuances of opinion.

Should you come to the board prepared to quarrel with the cook and determined to condemn the fare, what can be done?

If without reading these pages regularly you happen to pick one issue and find something that displeases you and develop a fixed antagonism upon your mind, what can be done about it?

If a friend finds pleasure in trying to be funny, throws spit-balls at us and you are sycophantically inclined and are pleased to throw a few more, what has been gained? Certainly I shall not be bettered. Positively I shall not allow myself to be injured. But the mass of well-bred humans do not enjoy seeing spit-balls thrown and my defenders rise unasked.

The point of which is that you are the readers who are to be satisfied if it be possible to satisfy you. I am here to do just that if it be within my power. We are aimed for the same place, striving for the same thing, from opposite ends. Each traveling toward a common center shall meet and pray kind Fate we may shake hands in fellowship. If we pull apart, in the name of common sense, let us pull so far apart that we cannot in any way bother one another.

And this constitutes my thanks and my retort.

There is left one particular critic to thank. The one who constructively tells us what he wants or does not want, without rancor or malice. The one who loves Camera Craft so well that its interests are his and what seem to him its errors give him a friendly regret. He is helpful. He aids in the maintenance of our balance. He gives us a point of view we can get no other way.

The partisan for us makes life sweeter, the partisan against us makes life interesting, but the non-partisan is the feeder of our perspicacity. We are grateful for each and all. Somehow, though, we do love the booster. And that is an honest confession.



## Association News

JOHN R. SNOW, Mankato, Minnesota, *President*

CHAS. AYLETT, Toronto, Canada, *1st Vice-president*

D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*

GEORGE STAFFORD, Chicago, Illinois, *Treasurer*

C. W. HOWSON, Minneapolis, Minn., *Chairman Commercial Section*

PAUL TRUE, New York City, *Chairman Manufacturers Bureau*

L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*

### Two Books For Subscribers

The National Advertising Committee announces that within a short time it will have ready for the subscriber-members of the P. A. of A. two new merchandising books which will be of tremendous business-building value to every photographer. The two are for the two branches of the business—one for the portrait photographer, one for the commercial photographer.

Each book, the committee's announcement says, sets out a definite and complete advertising and merchandising program for the photographer who wishes to use it. Each includes actual samples of advertising and selling material—folders, sales letters, enclosures and so on—with a detailed explanation of just how each can be used to best advantage. Both books and their individual contents were prepared by Maxwell Droke, second vice-president of the Millis Advertising Company, advertising counsel for the P. A. of A. and regarded as one of the best advertising copy writers in the country. He has been in close consultation with the members of the National Committee for several months in the preparation of these books and every item has been carefully checked by the committee. All material used, of course, is tied up with the National Advertising.

At the last meeting of the committee, when these books were presented in final form, one member of the committee, a man of vast merchandising and advertising experience, said:

"Gentlemen, if the subscribers to the campaign had got nothing more for their money than one of these two books, they would have been amply repaid."

The Portrait P starts out with a full

explanation of the plan, urging the photographer to adopt a definite system and explaining just how he can do it. It goes into careful detail on how to build a good mailing list and keep it up to date, and then it presents, item by item, all the different forms of advertising matter that have been prepared under the direction of the committee and that can be used by the photographer in keeping his mailing list at work.

The Commercial Book has an equally complete plan and equally detailed directions as to how it can best be used. It likewise has monthly letters, leaflets, blotters, envelope enclosures, all built around the National Commercial Advertising, using the same photographs and copy appeal, but localized for the use of the individual.

Two books deserve special discussion. One carries a complete description and explanation of the P. A. of A. telegraph delivery service, illustrated with commercial photographs and containing a convincing statement of the value of that service to all business men who need photographs from other cities. It bears the title "The Four Thousand Mile Lens."

The book "How to Use Photographs in Your Business" is of particular value in attracting the attention of business executives to the need for photographs in advertising, in catalogues, pamphlets, in sales letters and for salesmen's folders, and all the other possibilities. It is a book filled with practical, definite suggestions for the use of photographs in business and of course is completely illustrated with some of the best commercial photographs obtainable.

If you do not get your copy, make it a point to find the reason why.



## Master Photo Finishers of America

A. E. Block, President.....27 Von Hillern St., Dorchester, Mass.  
 Fred. Mayer, Vice-President.....Portland, Ore.  
 Wm. J. Meurer, Treasurer.....212 State St., Madison, Wis.  
 Guy A. Bingham, Executive Manager.....Box 1020, Rockford, Ill.

### Territorial Vice-Presidents

South-Western States: W. F. Honnen.....1240 S. Main St., Los Angeles, Calif.  
 North-Western States: C. M. Coffey.....284 N. Commercial, Salem, Ore.  
 Mid-Western States: Chas. W. Lynn.....3917 Orleans Ave., Sioux City, Iowa  
 North-Central States: John H. Seamans.....7052 Jeffery Ave., Chicago, Ill.  
 Central States: E. L. Hurlburt.....315 St. Louis St., Springfield, Mo.  
 South-Central States: J. A. Hammond.....Box 650, Meridian, Miss.  
 South-Eastern States: Elon C. Robison.....105 Third St., N. St. Petersburg, Fla.  
 Great Lakes States: C. P. Phillips.....6930 Gratiot Ave., Detroit, Mich.  
 Dominion of Canada: W. A. Taylor.....274 Carlton St., Winnipeg, Man., Can.  
 Central Coast States: Wm. H. Eichner.....1210 "C" St., N.W., Washington, D.C.  
 New Jersey—New York City: J. G. Taylor.....24 E. 23rd St., New York City  
 New England States: H. K. Atkins.....Middleboro, Mass.  
 Mid-Eastern States: M. J. Koch.....535 Penn Ave., Pittsburgh, Penn.

### Fair Profits

The price of a doctor's visit is not the cost of his time plus the value of his skill but the sum total of these and the hours between calls when he is ready and waiting to cure disease and save lives.

The cost of a roll of films is not the cost of materials and labor plus the percentage of profit but with the added item of spoilage, loss through bad accounts and a dozen other items.

The cost of photo-finishing is not completely estimated till the lost days, the rainy days, the Thursday and Friday slumps are added in. It is altogether too easy to say the final consumer should not be made to pay for the days on which there is no production. Who is to stand the overhead while you and your force wait for the work to come in?

Business is not an eleemosynary institution. If the thing you have to sell is not worth enough to give you a living and interest on your investment it is not worth selling. And in Photo Finishing your work is good or it is rotten. It is worth a good living and a growing bank account or it is not worth anything. There is no happy medium in this.

Assuming that your work is right you have reason to expect that every day of every month shall show an average profit. Such averages can only be obtained by putting an overall value on the output that shall adequately cover dull days, dead days, and incidental losses.

Business gotten at prices unfair to yourself is a bid for insolvency or at best slavery. If you pass your poverty on to

those that work for you that slavery becomes by that more general, more deplorable. The very accounts that you have gotten do not gain in the end for you will not be there when they need you most. You shall be looking for someone to buy your junk and for a job.

I am still the idealist that I was when first the industry engaged my interest. The conviction still holds that the public are willing to pay a fair price for really good work and that they will consider no work cheaply done that spoils their films and delivers them poorly made prints and fading ones, at that.

What is the deduction? Make it for yourself. Compete on quality and service. Let those whom you would see out of the industry have all the unprofitable accounts. Improve your work, avail yourself of every invention that will better production and lower costs but never save on materials or labor. Get the best, use the best, work the best, deliver the best, and insist on the best price.

The public have been educated to immorally short hour service and unholy prices, sometimes no price at all; why cannot they be educated to demanding the best and to paying well? We must not be so pessimistic as to believe that taste can only be trained downward and that the people from whom we get our living will take any old sort of work as long as it is cheap. The bargain hunter is stung the oftenest. The discount hog gets the worst of it—the worst shop, the worst material, the worst work. His customers find him out sooner or later and he goes down with you.



Let us have sense. Once convinced that better prices bring better results and the public will be your best ally. But never kid yourself. It will have to be BETTER WORK.

## More Film Used With Each Year

In spite of the fast, hard lives we are supposed to live in America, it seems that there is still time to stop the procession and take plenty of snap-shots as we go. According to a local Master Photo Finisher, who was interviewed today in connection with the attractive photo window displays installed all over the city for National Camera-Week, the number of film exposed increases about ten to fifteen percent each year.

"You see," explained the Finisher, "only since the simplification of the hand camera and the introduction of roll film about twenty years back, has the public been able to take pictures in connection with

home life, outings, vacations, and other pastimes. So it was necessary for the parents of today to acquire their own cameras and pretty much find out how to use them through experience. However, today these same parents are seeing that their children have cameras and are in turn teaching them something about camera operation as a starter. Which means a constantly heavy increase in the number of cameras in use each year."

Today, cameras which will take good pictures can be had for a dollar or two. True, they are box cameras, but the simplification of operation is such that many have been led to believe that "box cameras take the best pictures." In connection with National Camera-Week, the local Master Finishers are offering in most of the local stores handling photo service, a special camera of this type priced under the dollar mark. Which makes it possible for anyone who chooses to own a camera.



## Pacific International Photographers' Association

Embracing Alaska, Alberta, Arizona, British Columbia, California, Hawaiian Is., Idaho, Montana, Nevada, Oregon, Utah, Washington.

WILLIAM M. BALL, President; Corvallis, Oregon

The time has come to take you all into the secret of our plans and let you know what has been done to assure your having a profitable and pleasant time at the convention this month. Loyalty to your profession should impel you to attend. That is the inner urge. Inducements in plenty are now provided for what is needed of outward influence to have you pack the li'l ol gladstone and travel this way. Read the program and judge whether it is worth traveling over ten times the distance to hear. Then remember the old friendships to be freshened up by another contact and the new friendships to be made for a broader, more expansive outlook on life. We are looking for you. Our hands are extended to you.

Here is the program as it stands:

Saturday night, July 7th, a meeting of Portland photographers was held consisting of all three branches, largely attended.

Before the close of this meeting no doubt was left in the minds of P. I. P. A. officers or the convention manager, Mr. C. F. Richardson, of the success of the next Pacific International Photographers' Convention. Well organized committees on publicity, hospitality, and friendship swung into action and their reports left no doubt of the pleasure which will be afforded anyone coming to this convention.

First, the convention will be held in the beautiful new Masonic Temple, which is conveniently located close to several of Portland's newest hotels and theaters. The beautiful Shrine floor of the temple could not be more ideally adapted for such use. A large lobby furnishing ample room for the picture salon, while surrounding the hall are well furnished, spacious lounge and committee rooms. An ample dining room is planned to be used each day where all may lunch together.

## CAMERA CRAFT

Opportunity will be taken of the lunch hour to continue a most felicitous, friendly program of merriment.

**Hotel Accommodations.** The Heathman Hotels have been designated as the official hostelry and are within one block of the convention hall. The housing committee through the Portland Chamber of Commerce secured assurance that notwithstanding this convention is held during the busiest tourist season, the regular published hotel rates will maintain.

Mr. C. F. Richardson, our convention manager, needs no introduction or commendation to those who have attended or heard of the 1924 convention in Portland.

Mr. Richardson has his local committees and plans well organized and under way.

### The Program

Tuesday morning at 10:00 A. M.—The manufacturers' booths will formally open; registration of members and delegates—starting the Treasure Hunt, and the greeting of old friends, incidentally making many new ones. Twelve o'clock the call to luncheon in the Masonic dining room. Beginning the "Festival of Mirth," which will continue until 1:25.

1:30 P. M.—Convention formally called to order by D. Perry Evans, convention chairman of committees; singing of National Anthem followed by community songs. Invocation. Address of welcome by the Mayor of Portland, Honorable George L. Baker. Reply by President Ball, followed by Chairman Evans' address of welcome on behalf of Portland photographers. Response by First Vice-President Samuel Walters, of Seattle, Washington. President Ball then receives the gavel, followed by his address, devoted to an outline of what the present Board suggests and has started to work out as a constructive program for the association. This will be followed by an announcement of committees by the Third Vice-President, Mabel Spencer, of Alameda, California.

3:15 P. M.—Lecture and demonstration by J. Anthony Bill, of Cincinnati, one of America's most successful and progressive photographers.

4:30 P. M.—Division roll call, followed by business organization, directed by the chairman of each division.

5:00 P. M.—Organization of round-table

groups, under direction of the general chairman.

Tuesday evening—Certification of members of the Photo Service Bureau, and general business organization of the Certified Bureau.

### Wednesday, August 29

9:00 to 10:00 A. M.—Manufacturers' exhibit.

9:00 to 10:00 A. M.—Clubs council meeting of "Certified Photographers."

9:30 to 10:00 A. M.—Concert in main auditorium.

10:00 to 11:00 A. M.—Address by L. C. Vinson, our National Secretary, P. A. of A., on "The Value of Organization."

11:00 A. M.—Commercial demonstration and lecture by Harry Elton, of New York; "Color Separation and Copying Old Pictures."

12:00 Noon—The ladies leave convention hall in transportation provided by the entertainment committee for luncheon at one of Portland's beautiful country clubs. After luncheon those who wish will be returned to the hall, while others may join a party to visit Portland's famous Rose City Park, and the beautiful Portland Heights' residential section.

1:30 P. M.—An address by Mr. W. B. D. Dodson, secretary of Portland Chamber of Commerce. Subject: "The Necessity for Close Co-operation in Present Day Business and the Economic Value of Photography as an Industry."

2:30 P. M.—Practical demonstration by Ralph Young, of San Francisco, on "Dramatized Photography."

3:30 P. M.—Address by George W. Harris, of Washington, D. C.: "Photographer of the Notables." George tells how he gets 'em.

4:45 P. M.—Division round-table discussion.

6:00 P. M.—Dinner of Past Presidents, P. I. P. A., and presidents of affiliated clubs.

8:30 to 10:00 P. M.—Musical concert. Ray Jenkins, of Indianapolis, will tell you how to advertise and sell your personality.

### Thursday, August 30

9:30 to 10:00 A. M.—Report by General Chairman of round-table committees.

10:00 A. M.—Lecture and demonstration by J. Anthony Bill.

## CAMERA CRAFT

11:00 A. M.—“Photo Finishing and Master Photo Finishers,” by Fred Mayer, First Vice-President, Master Photo Finishers of America, of Portland, Oregon.

12:00 Noon—Community luncheon in Masonic dining room. Convention picture.

1:15 P. M.—Address and demonstration, by J. H. Mott, Second Vice-President, P. I. P. A., of Los Angeles, California. Subject, “Business System, or How to Get Your Work out When Promised.” Mr. Mott is noted as one of California’s most clever commercial photographers, and employs a business system with a wide reputation.

2:15 P. M.—Sales talk, by George Harris.

3:15 P. M.—Report of Resolutions Committee, followed by election of officers.

6:30 P. M.—Annual convention banquet and ball.

### Friday, August 31

9:00 A. M. to 9:30 A. M.—Last assembly at convention hall. Embarkation for Columbia River Highway trip, with picnic. At Eagle Creek camp grounds, a fine barbecued dinner is planned. Eagle Creek camp ground, in the Columbia River Gorge, surrounded by cliffs 4,000 feet or more in height, is one of the delightful

wonder spots of Oregon. Under the shade of the giant trees and around the cheery camp fires the only sad event of the whole convention program will take place. There let us gather as the Indians of old, pledging our friendships to continue through the months of separation, and our loyalty and zeal for our organization, and its new leaders.

### The Speaight Collection

One of the most notable collections of photographic portraits perhaps ever exhibited in America, known as the Speaight collection, purchased by the Eastman Kodak Company from Mr. Speaight this year, is to be shown at the Pacific International Photographers’ Convention, August 28 to 31 inclusive. Mr. Richard N. Speaight who produced the collection had the unusual experience of being court photographer to English, as well as other royalty for the past 14 years by appointment. This collection will be exhibited in Portland by special arrangement of the convention management, and will be of unusual interest. The pictures as mounted are about 16"x20" each in size.

DO NOT FORGET THE DATES—

AUGUST 28, 29, 30, 31

All Roads Lead to  
PORTLAND

And they are in fine condition.

GET READY! COME!

Get Behind



This Sign





Ye Editor Retaileth Newes of Ye Profession and in Quaint Italics Titillateth Ye Sphynx with Hys Quill

### Dr. E. J. Wall Honored

The council of the Royal Photographic Society has awarded the honorary fellowship of the society to E. J. Wall, associate editor of *American Photography*, for outstanding achievements in photographic literature. The only other American honorary fellows are Dr. Mees and Dr. Shepard for scientific achievements and Alfred Stieglitz for his service to pictorial photography.

In his youth Mr. Wall, like many a school boy, was fascinated by his elementary experiments with test tubes and so selected chemistry as the particular field for his life endeavor. During his student days in 1878 he took a few lessons from a professional photographer in the wet collodion process which he used for making photomicrographs and soon began to make collodion dry plates and emulsion of his own. After a few years as a practical chemist he joined the staff of B. J. Edwards & Co. of London who were the first to introduce orthochromatic plates into England. Here he acquired a knowledge of gelatine emulsion making as well the coating and sensitizing of albuminized paper, which was then the principal commercial printing process. In 1889 he wrote the "Dictionary of Photography" which is still published under his name, although he has had no connection with it since 1896. He was later one of the authors of Cassell's "Cyclopaedia of Photography". From 1889 to 1892 he edited *Photographic Answers*, a monthly journal devoted to the technical side of photography. In the latter years he became editor of *The Amateur Photographer* and translated for serial publication in that journal Volume III of Eder's "Handbuch" dealing with gelatine emulsion making.

He also translated Fritz's "Photolithography" and wrote a manual of the carbon process. In 1896 he became editor of *The Photographic News* and instructor in three color work in the London County Council School of Photoengraving. In 1900 he became chemist to the European Blair Camera Co., which specialized in the manufacture of celluloid as well as cinematographic and roll film. While connected with this firm he had a serious accident which kept him on his back for two years. Happily, as he himself says, his brains were not in his legs, so that he was able to keep up his writing and published a translation of Konig "Natural Color Photography", which he was particularly qualified to do, as this subject had been his hobby since 1888. He was for many years a member of the staff of *The British Journal of Photography* until he came over to America in 1910 to make celluloid acetate and motion picture film for the Fireproof Film Co. of Rochester. In 1912 he was appointed Professor of Photography at Syracuse University and joined the Technicolor Motion Picture Co. of Boston, specializing in motion pictures in color. Since 1921 he has devoted his time to writing and consulting work on photographic patents and technical problems. From his first coming to America he wrote photographic abstracts, first for *American Photography* and later for *Wilson's Photographic Magazine* returning to *American Photography* as a permanent member of the staff when *Wilson's* went out of existence. In recent years he has published "Practical Color Photography", "Photographic Facts and Formulas" and "The History of Three Color Photography", the latter being pronounced by competent judges to be the most thoroughgoing and exhaustive treatment of any photographic

subject ever produced in any language. This magnificent volume of 757 pages refers to some 9000 original articles and 3400 patents, and, because of Mr. Wall's practical experience in all phases of the subject, elucidates the majority of the references by comments drawn from personal experiences. H has been a member of the Royal Photographic Society since 1892, a Fellow since 1895 and served for several years as member of the council and judge of the technical section of the annual exhibition. He is a Fellow of the Chemical Society of London, a member of the Society of Chemical Industry and the Society of Motion Picture Engineers and an Honorary Fellow of the Boston Y. M. C. Union Camera Club.

All of which emanates from a source of information outside these offices. We take particular pleasure in availing ourselves of the opportunity to acknowledge our own indebtedness to Dr. Wall for much knowledge gotten from his stupendous research work and his voluminous writing. His place in photography is monumental and will gain as time goes on. Posterity will get a perspective of his value that we are perhaps likely to miss.

### Myron Wurts Moves

Probably the most completely equipped photostat establishment in the west is that of Myron Wurts, Jr. which recently moved from 334 Market Street, to the third floor of the Traders' Building at 417 Market Street, San Francisco. Mr. Wurts has made it a fixed practice to put an appreciable part of the profits back into his business in the shape of new and more modern instruments and materials and his courage and enterprise have paid dividends.

### Carl Oswald With Leitz

He may flit like the gentle Butterscotch but he worketh mightily like the busy bee. Carl has changed locations rather frequently in the past few years but wherever he has been two blades of grass grew where one had grown before and now as manager of the Photo Optical department of Leica we may expect results and an access of interest in the wonderful little instrument and accessories which bear the Leica name.

### Hail Fellow Poet

If Charlie Abel in the exuberance of his youthful inspirations could only foresee what dangers he invites, what antagonisms he arouses by daring to break into song he might hesitate. The worst offense in the following verses is that they are good. The mitigating circumstance is that there is no attempt at imagery and no appeal to the fancy. That helps some. But the sense is all there and the advice good. Not one of us but has at some time, and frequently, hoped, longed, for letters that bring a human feeling, a touch of the man to man feeling. Charlie has written an essay in rhyme and meter. The essay is good, the rhyme and meter perfect, and it could have been placed nowhere so well as in the Nation's Business Magazine.

#### THE CORRESPONDENT'S PLEA

*If we could write the things we feel,  
Could make imagination real—  
If pencil, paper, pen and ink  
Had but the gift to make us think,  
We'd shed our studied attitudes,  
Inane remarks and platitudes,  
And write our missives just as though  
They went to people whom we know.*

*We'd scorn such terms as "even date"  
And "in reply we beg to state,"  
"Regarding" would not be "in re,"  
Our meanings would be plain as day.  
"Yours truly" we would not "remain,"  
From stilted phrases we'd refrain—  
How vivid would our letters be  
In simple phraseology!*

*No "15th inst." or "30th ult."  
Our readers' senses would insult;  
From florid bombast like "esteemed"  
Our sentences would be redeemed.  
In homely words and simple style  
We'd write each letter with a smile—  
Oh! What a difference—goodness knows,  
If we could write plain English prose!*

—Charles Abel in Nation's Business Magazine.

## AND—

If there is any more Chit-Chat to be unloosed, let us have it at the Portland Convention.

## YOU—

Can then have the chance to do the Chit-Chatting.

**Our Convention This Month**

August is here. On the 28th, 29th, 30th, and 31st, we foregather in the glorious city of Portland. The city where we are welcomed without stint or constraint. The city where conventions are not formal affairs but friendly get-together functions. For you a rose in Portland grows.

Those who attended the previous Portland convention need not be told of the wonderful time, of the intimate but instructive programs, of the compact and comprehensive displays. It was an affair upon which to look back with fondness. None who went to that will miss this one. But we want, we expect and we shall have many more coming who might as well be told now as anytime that the P. I. P. A. has many things up its sleeve that will make the missing of the 1928 convention a business loss.

**A Kales Exhibit**

Again it is our privilege to commend the idealism that is occasionally shown by business men in the conduct of their affairs. Hirsch and Kaye have a wide and beautiful window which they use to exhibit the higher grade of their photographic merchandise. This week it happens to be a Bromoil exploitation and Arthur Kales' transfers are on show. Not a suggestion of buying, not a price tag, just an art exhibit and the materials that go into the making of the works of art.

Incidentally Kales has emerged from his dense reticence and shows some of the finest things we have had the blessing to see and enjoy. They are lyric, they are dramatic, they are romantic, they are tragic. Truly this odd genius mocks our callous stupidity when we let him rest. Persistent insistence should be brought to compelling him to exhibit in every American city. London has better opportunities in that respect than we who live across the way or around the corner from him.

Some praise should go to Mr. Galvin through whose efforts these window displays are gotten. May he gain in courage and continue in those efforts. And to Hirsch and Kaye should go a general gratitude for this uncommercial dedication of their best window space to the higher cause of artistic photography.

**A Weston Exhibition**

The announcement that the East West Gallery of Fine Arts of the Western Women's Club, 609 Sutter street, at Mason, will show the photography of Edward Weston and that of his son, Brett, July 1st to 15th, has again stirred up the discussion among critics and art patrons, "Can photography be art?" There are those who feel that the camera is a mechanical contrivance which the artist points at something already prepared for him and achieves a reproduction but not an art. . . While the other side points out that the camera is no more mechanical than a paint brush or a copper plate or a chisel.

Weston himself says that his photography is an expression of his feeling for life. Through it he presents objectively the rhythm, the form and texture of nature. He attempts to record the quintessence of the object or the element before the lens rather than to make an interpretation which he considers a superficial phase or passing mood. He says "Photography is worthless when imitative of another medium, through technical tricks or influenced viewpoint. Incoherent emotionalism must be supplanted by clear thinking. Cleverness must give way to honesty. Photography can make its place as a creative expression only through sincerity of purpose, and a definite understanding of the finest usage of the medium.

The work of Brett Weston was done at the ages of fourteen and fifteen, after less than a year's experience and entirely free from the personal assistance or interference of his father, Edward Weston.

**Will Connell Exhibit**

From June 18th to July 7th, Mr. Connell showed some of his prints as one of four Craftsmen, seemingly organized for the furtherance of their art and the creating of better public appreciation. The photographs of Connell and Edward Weston and the block prints and etchings of Aries Fayer and Franz Gerit were hung in the Los Angeles Public Library, another evidence of the progressiveness of this great city which we enjoy razzing but which compels our respect in many ways.



## Commercial Photographers of Los Angeles

On Thursday, March 15, a number of our members gathered at the Masonic Club for dinner and had a most pleasant time. Two visitors, J. W. Bledsoe, an old timer, and P. E. Williams, of the younger generation, were with us and liked us so well that they both joined the association. We are making satisfactory headway in getting new members.

Mr. George Clifton reported that the committee had gotten off a very creditable exhibit of pictures to the National Convention at Louisville, Ky.

Through the courtesy of the National Photographer's Association and the assistance of B. B. Nichols, Inc., we had the pleasure of viewing a splendid traveling exhibit of photographs of the 1927 convention. This was very instructive and worthwhile.

We will be entertained at our next meeting by Mr. Mott, with system charts; and by Mr. J. W. Bledsoe, with moving pictures of the High Sierras.

It was an interested and enthusiastic bunch of members of the Commercial Photographers Association who gathered at the Masonic Club, 623 S. Grand Ave. in Los Angeles on the evening of June 21st. After a really good dinner we adjourned to the store of B. B. Nichols, Inc. for our business meeting.

Our treasury showed up well.

Our attendance good.

Our Committee on publicity headed by George Clifton reported a page in the rotogravure section of the Times, our exhibit pictures and a number of window displays to be made by the Security Savings Bank at Seventh and Spring Streets and other branches.

Certified photography was discussed.

All of the officers now incumbered were reinstated and elected unanimously for the coming year. Mr. Mott of the Mott Studios, president, to succeed himself and Fred H. Skinner of the Mission Photographic Service Co. 1919 S. Hoover Street, L. A. is to fill the secretary's and treasurer's place for another year.

FRED H. SKINNER, Secretary.

## NOTES & COMMENTS



### New Goerz Prices

The following announcement from C. P. Goerz American Company will be of interest to the trade and buyers.

Since placing our wide angle 15 mm Hypar lens for 16 mm Motion Picture cameras on the market it has received such an enthusiastic reception that we have been able to reduce the manufacturing cost considerably by making these lenses in larger quantities.

We feel that we should now pass the saving on to the consumer as we believe this will further increase the sale and therefore benefit not only the ultimate consumer but the dealers as well.

On or about May 10th, we will announce a new price which is set at \$57.00 for the lens in precision focusing mount and \$7.50 for a set of special Filmo finder lenses or

a total of \$64.50 instead of \$75.00 at which price this remarkable lens has heretofore been sold.

The speed, originally F. 3, has been increased to F2.7.

As it is our policy to co-operate with and protect our dealers in respect to price fluctuations we are sending you this advance notice. If you should have in stock, on May 10th, any of these wide angle lenses for which you paid us at the old list price of \$75.00, we will gladly issue a credit, to apply on future orders, for the difference between the old and the new price effective on May 10th. To get this credit you will please send us, after May 10th, a statement of the wide angle lenses you have in stock, giving us the individual lens of each.

For the benefit of those dealers who

are not yet familiar with the 15 mm Hy-par lens, we would say that this lens increases the angle of view on the long side of the plate from 24 degrees, given by the regular one inch lens, to 38 degrees. The 1928 lens can be used on the Filmo and Victor cameras interchangeably with the regular lens.

## Circuit Enlarging

As the commercial photographers in the smaller cities begin to learn what profit their city brothers are making from the exploitation of circuit enlargements they, too, are adding to their incomes in a large way by making an effort to acquaint their patrons with the possibilities of panoramic views thrown to impressive sizes. In this work metropolitan and suburban photographers always look to Morton and Company, 515 Market Street, San Francisco, who have made a speciality of this work and through the enterprise and ingenuity of Laurence B. Morton, who has invented processes and equipment to make a 40 foot enlargement look like a contact print, their appeal has been stepped up to the ultimate. Get your Circuit out and be busy. Send your negatives to Morton and cash in.

## Out Of Town Repair Work

The Camera Hospital, William F. Peters of 717 Market Street, San Francisco, is prepared with an extra force and the usual complete equipment to handle all repair and reconstruction work for out-of-town dealers and photographers. To compensate for the time consumed in shipping to and from places the promptness of the service and the reliability of the work has always more than satisfied the patrons. Dr. Peters may have encountered problems in photo mechanics which he could not solve but we never heard of them.

## Agfa Film

Wherever you go you will see filmpack users discarding the Agfa carton and inserting the Agfa Filmpack in whatever camera they happen to own. Lately there has been evinced a most interesting activity in the demand for Agfa Rollfilm and the Agfa Ansco Corporation have been compelled to enlarge the factory by building a new two million dollar plant. Agfa and Ansco films may be had anywhere for the asking.



## Some Eastman Novelities

Eastman goods sell for many reasons but the most evident of these are that they are advertised in a way that makes a market for the dealers and convince the prospective buyers that the goods are worth all the money put into exploiting them, and, they are made to supply a need. Take the Vanity Kodaks, for instance,—this being a period of color here are cameras in the pastel hues which will match Miladies' costume whatever the color scheme. The camera, the exquisite Vanity Case in which it is carried, and the lining thereof are works of art. These are for the amateur.

For the professional and advanced amateur who will be satisfied with nothing less than a professional equipment there is the new printing machine. New in design and principle. Its one point light source, system of light and time regulation, control of start and stop, and ease of local control through dodging and masking make it a wonder. A request will bring attractive and enlightening literature but best would be seeing for yourself at the nearest dealer.

## Kawee, The Thinnest Camera

Women have become obsessed with the reducing mania. We live in times when to be thin is to be elegant. The Kawee needs no reducing to be thin or elegant. It has a maximum thickness of  $1\frac{1}{4}$  inches, which is about the thickness of two plateholders, and weighs at most 18 ounces, which means less than the weight of one loaded 5 by 7 plateholder. It has every modern improvement, a bellows draw of sufficient length for every use, and may

be had with Zeiss Tessar or Schneider Xenar lens equipment. How they get a large aperture lens and Compur shutter into an inch and a quarter is a mystery that should intrigue you. It mystified us till we saw and handled one of these instruments while in New York. Write Burleigh Brooks at 136 Liberty Street, New York City, if your dealer cannot show you one.

## Ilex Shutters

Everyone knows the Paragon Anastigmat, most professionals are familiar with and love the Photoplastic Portrait lens, but few realize that the sweet little snutter on their camera that purrs like a Swiss watch and is as true in its timing is apt to be an Ilex. Make yourself acquainted with the line at your dealer. Ask to see an Ilex Shutter and study its perfection.

## Mallinckrodt Chemicals

If the druggist used inferior chemicals life would be endangered, and that makes it a serious matter. When you buy any old chemicals for your photographic use you spoil much costly material and that is no joke though only your pocket suffers. If all the wasted paper, plates, films, and so forth that has been ruined by inferior chemicals were known we should find that the best, which means Mallinckrodt amongst two or three other brands, costs less, far less in the long run. When you buy your next bottle of chemical specify Mallinckrodt.

## The Twinark Lamp

With an unusual percentage of efficiency and a low price this arc-lamp offers the added advantages of automatic lighting and extinguishing that exempts the user from the need of patience in passing a rod from carbon to carbon to start the circuit and of facing the blinding glare in blowing out the flame.

## Holliston Photo Cloth

The latest circular issued by the Holliston Mills is really more than a mere bit of advertising. It is a lesson in mounting on and with cloth as an interlining between two photographs or a backing. Photo Cloth makes a paper print equal to one on canvas. Holliston textures are to all intents and purposes as fine linen,—tough and still sheer. Get your lesson the factory in Norwood, Mass., or any of

from the nearest Holliston Mills branch, the Eastman Kodak Stores, Inc. In many cities it can be supplied by the dealer

## Wold Air-Brush

This is an age of color and whether or not the photographer proposes to indulge in the leisurely hand-coloring of prints or the equally artistic but infinitely quicker production with air-brush is for himself to decide. The Wold Air-Brush has been standard for so many years that it seems redundant to praise it here and now but if the factory is not working to capacity and behind in its orders there must be many professionals who still have to become enlightened on the uses and profits to be gained from a Wold. Write to The Wold Air Brush Manufacturing Company, 2173 California Avenue, Chicago, Illinois, and ask for literature.

## Warm Tones By Development

Some years back I devised a makeshift way of getting warm tones in first development by a ratio of exposure to dilution. The browns were very good and the results uniform when I didn't slip in the timing and ratios. Now the Eastman Kodak Company have put a developer on the market which is as absolute as ordinary metol-hydroquinone. It always gives the same brown in the usual method. The makers recommend it especially for Athena Old Ivory. Certainly the name is alluring. Brown on old ivory.

## Goerz Lenses for Cine-Kodak

An announcement of importance to owners of the model B, F/1.9 Cine-Kodak, comes from the office of C. P. Goerz American Optical Co. The famous line of Goerz cine lenses is now available in mounts to fit this camera, bringing the advantages of interchangeable lenses with consequent vast improvement in cinematography.

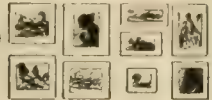
No change is required on the camera other than replacement of its plate mount and permanent screws with the Goerz plate and thumbscrews. By having slits instead of holes this plate may be removed in an instant by loosening the two thumbscrews and giving the lens mount plate a half inch twist. Thus one may change from the wide-angle lens to the fast lens, standard lens or telephoto lens at a moment's notice.



SALON WEEK  
IS COMING



EVERYBODY  
A WINNER



# CLUB NOTES

## Forthcoming Exhibitions

September 2nd to 30th, at Lwow; October 1st to 31st, at Wilno. Second International Salon, Pologne, Lwow, Wilno. Drugi Miedzynarodowy Salon Ji Artystycznej W Polsce, Lwow, Wilno, Pologne, 4 Rue Sokota. Closing date, August 1st.

September 3rd to 8th, inclusive, 1928. Eighth Annual International Salon, New Westminster, B. C. Secretary, D. E. Mackenzie, Hart Block, New Westminster. Closing date, August 18th.

September 17th to October 13th, 1928. Seventy-third International Salon of the Royal Photographic Society of Great Britain. Secretary of the R. P. S., 35 Russell Square, W. C. 1, London, England. Closing date, August 17th.

October 6th to 21st, 1928. Twenty-third Annual Paris International Salon. Secretary Societe Francaise de Photographie, 51 Rue de Clichy, Paris, France. Closing date, September 1st.

October 6th to November 4th, 1928. Second Salon Italiano D'Arte Fotografica Internazionale. The Committee of the 1928 Celebration, Gruppo Mostre Temporanee, Salon De Fotografica, Parco del Valentino, Torino, Italy. Closing date, August 31st.

### Los Angeles Camera Club

Banzai, good-girl, Miss Laura Slocomb. You have made a good issue of The Developer for June. The matter is well written, arranged and printed, but just one more staple will hold the pages together. From the very last paragraph we learn that Ole Olson went to a flea show and eloped with the leading lady. The editor warns him that he may get stung. Pessimistic. We, on the contrary, predicate a long and happy life and offer to play the Svenske Brollops. Skoll.

### To Pictorialists

The "British Journal Photographic Almanac", which is an annual publication circulating in all parts of the world, includes in each issue examples of pictorial photography, which are very excellently reproduced in photogravure. We are asked to notify our pictorial readers that the editors of the "Almanac" invite the submission of prints for the 1929 volume. All prints not accepted will be immediately returned. Prints (unmounted) should be marked on the backs with the title and the name and address of the author, and should be sent to the editors, "B. J. Almanac", 24 Wellington Street, Strand, London, W. C. 2.

### The Elysian Camera Club

Hoboken, N. J. recently held its annual meeting, re-electing the following members to office to serve for the coming year: Charles Westerburg, President; Martin Crane, Vice-President; George Sting, Treasurer and Recording Secretary; Karl Klokow Jr., Corresponding Secretary.

In a brief address President Westerburg thanked the officers and the members of the Club for their co-operation during the past administration and touched upon the progress which the Club had made in the course of the year.

Particular attention was drawn to the frequent Print Interchange exhibits conducted by the Associate Camera Clubs of America of which Elysian is a member. These exhibits are representative of the work of many of the foremost pictorialists in America and President Westerburg remarked the great influence which they have upon the general photographic work of the members.

Many plans for the furtherance of the Club's activities were suggested and discussed and arrangements were immediately made to put several into effect.

The Elysian Camera Club was organized in 1902 in the interests of the amateur photographer and is fully equipped to do

all phases of amateur work including portraiture, enlarging and lantern slide making. It enjoys the distinction of being the only camera club in Hudson County.

The general public is always welcome to visit the Club rooms and perceive the exhibits. Amateurs who are experiencing some difficulty in connection with photography are invited to communicate with the club. This entails no obligations.

## Brooklyn Institute

The following report from Manuel Muniz of the Press Committee will interest our readers and be an example to club secretaries. Mr. Muniz lets us have the news and puts it in such form as will make it live for those who read it.

Do not be alarmed at this long list of newly elected officers. I am sending you the complete list merely as a matter of record. It is practically unchanged from last years' setup, but the additions to it will serve to show that our outfit is increasing its activities to such an extent that we have to spread the work over a larger number of our members.

## OFFICERS AND EXECUTIVE COMMITTEE—Season 1928-29

President, J. W. Aughiltree; Vice-President, in charge of educational work, J. Milton Bergen; Vice-President, in charge of technical work, A. Merrell Powers; Secretary, Harry D. Scribner; Treasurer, Edw. D. Mudge, Librarian, Miss Mary Callaghan.

Executive Committee—Myers R. Jones, Chairman of Executive Committee; Alexander S. Ingram, Secretary of Executive Committee; J. Milton Bergen, Chairman Education and Demonstration Committee; Joseph Petrocelli, Chairman Committee in charge of Craftsmen's meetings; A. Merrell Powers, Chairman Committee in charge of Technical work; Samuel P. Ward, Chairman Annual Exhibition Committee; Walter E. Owen, Chairman Monthly Exhibition and Print Exchange Committee; Charles N. Case, Chairman Membership Committee; Manuel Muniz, Chairman Press Committee; Miss Mary Callaghan, Chairman Library Committee; Harry B. Fisher, Chairman Locker and Apparatus Committee; J. J. Skinner, Chairman Rooks Committee; Harry A.

Neuman, Chairman Outing and Entertainment Committee; H. D. Scribner, Chairman Shipping Committee; Edw. D. Mudge, Chairman Contests Committee.

Members Executive Committee at Large: Mrs. Antoinette B. Harvey, V. E. Duroe, Thos. Blake, Jos. Kraysler, H. R. Cremer.

Our craftsmen's nights are going strong and will be continued weekly throughout the summer. They are in charge of Mr. Joseph Petrocelli, the bromoilist, so we consider ourselves very fortunate.

As for our photographic outings (arranging for which Mr. Harry A. Neuman, the kalitypist, loses lots of sleep), even thunderstorms can't keep us in. Twelve showed up in the wet on May 27th and 35 came on the following Sunday. These outings will, of course, occur frequently throughout the summer.

As some of our activities might be of interest to your readers, I will drop you a line every once in a while, then you will be in a position to pass on to the printer whatever items strike your fancy.

## Associated Camera Clubs of America

As the result of the recent election, L. F. Bucher has been unanimously elected as honorary president of the Associated Camera Clubs of America. Mr. Bucher was the leading spirit in the formation of our organization and has been the chief worker in its behalf ever since its inception. It is with great pleasure that we announce that the member organizations have unanimously concurred with the action of the officers and directors in this appointment and the conferring of this honor upon Mr. Bucher for his past activities in connection with our organization. The honor is well merited, and it is most fitting that the first appointment should fall upon the worthy shoulders of our past president and most zealous worker.

In reference to the proposed A. C. C. A. Salon, this matter is having very careful consideration, and before anything further is done in regard to same, it is imperative that we know how many clubs will be willing to enter the Salon proposition. All active member organizations are requested to immediately communicate with H. G. Cleveland, secretary, 1222 Westlake Avenue, Lakewood, Ohio, and advise definitely whether they will be willing to

enter the A. C. C. A. Salon, in order that we may govern ourselves accordingly in the making of future plans. Please do not pass this paragraph by, but send your reply to the secretary before the matter is overlooked.

Don't forget that this organization has been formed and is in operation for your benefit. Your officers want to do everything they can to further your interests photographically. If you have any suggestions to make, let us have them. We will do what we can to work them out practically. Many suggestions are made which on the face of them seem feasible, but which upon careful analysis, prove impractical for such an organization as ours. Nevertheless, we want your suggestions, and we will be only too glad to give them our most careful consideration in an endeavor to work them out practically, for the benefit of our members.

If you are still behind in your dues, don't forget that we still have a treasurer, and the letters he is most interested in are those beginning with "Enclosed please find check." It takes both funds and co-operation to carry on an organization such as ours for the utmost benefit of our members.

In connection with the change of administration on the first of the year, there has been some mix-up in connection with the "1928" tags which should have been sent to all members. The treasurer is making every effort to get this matter satisfactorily straightened out, so if you have not yet received your "1928" tag, you are requested to be patient a little longer and you will receive your "1928" tag in due course.

## Buffalo Camera Club

The Tenth Annual Salon of Pictorial Photography in Buffalo will commemorate the fortieth anniversary of the founding of the Buffalo Camera Club, and it is the desire of the club to make this one of the finest exhibitions of pictorial photography ever assembled.

Through the co-operation of the Buffalo Fine Arts Academy, which controls the Albright Art Gallery, it will be possible for us to have unlimited space in the gallery, which is one of the finest in the world, and no doubt our next Salon will

attract world wide attention and interest.

You are cordially invited to send us six (6) prints for the Jury of Selection to pass upon, and instead of asking you to send all new work, we want you to select the six best prints which you have ever made, regardless of when they were made, and regardless of whether or not they have ever been shown in Buffalo or elsewhere.

The Buffalo Fine Arts Academy will have full charge of the hanging and arrangements of the exhibition, and they have specified that all mounts must be white, or very light toned, and must conform to one of four standard sizes. These sizes are shown in our formal entry blank, which may be had on application to the secretary of the Buffalo Camera Club at 528 Elmwood Avenue, Buffalo, New York.

## Fort Dearborn Camera Club

The last few months have shown most commendable activity in this representative club. During the month of March a collection of fifty prints by Dr. Ruzicka of New York were on the walls. For April there was an exhibit by Katsu and Shimojima, two Japanese pictorialists of Los Angeles. During the latter part of April we had a show from J. Vanderpant, of British Columbia. May brought a group of pictorial photographs from Johan Helders of Ottawa, Canada.

These exhibitions are open to the public every evening and Saturday afternoon. visitors are cordially invited to attend both our exhibits and Friday evening meetings.

## Pittsburgh Salon

The Photographic Section of The Academy of Science and Art of Pittsburgh has elected officers for the coming year as follows: President, Charles K. Archer; Vice-President, David R. Craig; Secretary-Treasurer, Byron H. Chatto; Executive Committee—George H. Morse, O. C. Reiter, P. F. Squier.

Associate Members of The Pittsburgh Salon elected this year are: Robert A. Barrows, Philadelphia; Ralph B. Bonwit, Baltimore; J. Walter Collinge, Santa Barbara; Fred R. Dapprich, Los Angeles; J. Ortiz Echague, Madrid, Spain; Johan Helders, Ottawa; Hon. Alexander Keighley, England; Prof. Rudolf Koppitz, Vien-



na, Austria; Geo. H. Morse, Pittsburgh; Wm. H. Rittase, Philadelphia; Miss Clara E. Sipprell, New York City.

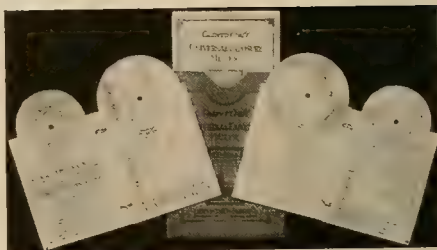
## Cleveland Photographic Society

If we attempt to print a small part of the program outlined for the coming month we should crowd out all the other clubs. Lectures by C. M. Shipman, Captain Finlay Simmons, Ralph D. Hartman, Captain Kilroy Harris, D. S. O. B. Stevens Bell, Charles H. Shipman and Lloyd L. Jones. The subjects cover everything, almost, in photography, from snap-shooting to scientific microscopy.

## Newark Camera Club

The Ground Glass is the most politic publication on record. It has been running a series of articles on The Camera

I prefer and certainly no manufacturer can find fault with that editor. Each article extols a different instrument, none will have been slighted when all is told, and every taste will have been gratified. Gee, but it must be a grand and glorious feeling to be an editor and be able to do that right in the reading pages. I once happened to mention owning a Graflex and a reader wanted to know if Eastman paid me a salary. Dr. Benedict confesses right out in print that he uses two (not at the same time) and gets away with it. That's what it means to belong to an influential club.



## Universal Exposure Meter

The Camera Craft Universal Exposure Meter is not just one more device for approximating how long to leave the shutter open to get an average of printable negatives. It is Universal in that it covers still and motion picture taking. In form it is a slide rule most carefully constructed and devised with scientific accuracy. The value is not in the thing but in what it is able to do. It delivers its cost in the saving of otherwise spoiled material and it delivers many times its cost, over and over again, in giving an assurance of results that might not be obtainable at a future time. The inventor, James Karuza, has gone into the subject of sensitivities with a thoroughness that will immediately impress the user of the Camera Craft Universal Exposure Meter and his professional skill has been applied in the mechanical details. For sale at your dealer or from Camera Craft. In a serviceable cloth container, with complete booklet. \$2.00.

# International Photographic Association

5600—Wm. E. Williams, C. P. O., U. S. S. Mississippi, c/o Postmaster, San Francisco. 6x8, 5x7, 3½x5½ Hawaiian and Navy views for miscellaneous views and portraits. Class 1.

5601—Philip O. Weston, c/o Chile Exploration Co., Chuquicamata, Chile, S. A., (Via Antofagasta). 2¼x3¾, Postcard, 3¼x4¼, Enlargements up to 8x10 South American views, mountains, desert scenes, camp life, Indian villages and Indian life, all kinds industrial and technical, mining and refining copper views; for mountain views, views people and customs foreign lands, South America, Mexico, India, Alaska, Africa; news events, auto racing, wild flowers and nature—construction work of any kind. Would like especially stereoscopic views all kinds. Class 1.

5602—M. Itoh, 101-103 Belfield Street, Ipoh, Perak, Federated Malay states. Postcard and Browne size, etc. Views of local scenes and native life for anything relating to photography. Class 1.

5603—Marcel Levy, Caixa 198, Sao Paulo, Brazil. Class 2.

5604—Parnes D. Randolph, 301 Tel. Bldg., Nashville, Tenn. Class 2.

5605—M. das Chagas, c/o Portuguese Legation, Peking, China. Class 3.

## RENEWALS

5501—Miss A. S. M. Brown, 33 Kent Road, Surrey Hills, E 10, Victoria, Australia. 2¼x3¼ to P. E. general landscapes and river views, animal and flower studies and city views for same and Indian and Western scenes. Class 1.

5554—Sam S. Hailey, Route 4, Paragould, Ark. 1½x2½, 2¼x3¼, 3¼x5½, 4x5, 5x6, 5x7, Mountain scenes for same. Class 1.

5356—Harry E. Emerson 731 E. Maryland St., St. Paul, Minn. Class 2.

# CAMERA CRAFT

## KODACOLOR

WHAT IT IS AND HOW IT WORKS

By Dr. C. E. K. MEES

## MOTION PICTURES

IN NATURAL COLORS

PROJECTED FROM BLACK  
AND WHITE FILM REELS

A MARVEL MATERIALIZED

## BLACK LIGHT PHOTOGRAPHS

By Dr. HERNAN GOODMAN

## THE UNIVERSAL CAMERA

By W. P. MATTERN

SAN FRANCISCO

CALIFORNIA

For Perfect Pictures

( Call it  Gay-vert )

## ROLL FILM

"Rich in Silver"—"Fits All Cameras"

Ultra-Fast — Orthochromatic — Non-Curling — Non-Halation

Descriptive Catalog on Request—Address Dept. No. 4

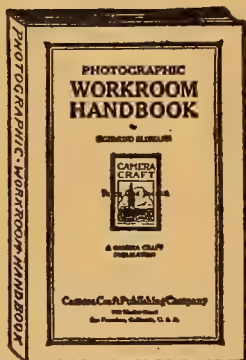
**THE GEVAERT COMPANY OF AMERICA, Inc.**  
423-439 WEST 55th ST., NEW YORK CITY

CHICAGO, ILL.  
413-421 N. State St.

PORTLAND, ORE.  
345 Salmon St.

TORONTO, CAN.  
347 Adelaide St., West

*Manufacturers of Photographic Products for more than a Third of a Century*



*The Second Edition*

## Photographic Workroom Handbook

By SIGISMUND BLUMANN  
Editor of Camera Craft

**IS READY NOW**

The first edition in paper covers is exhausted and in accordance with its fixed policy, Camera Craft shares its profits with its friends by putting the surplus into production without increase of price.

This edition is fully corrected, enlarged by several formulae and

**BOUND IN CLOTH AT THE SAME PRICE  
ONE DOLLAR**

*At your dealer or from*

**CAMERA CRAFT PUBLISHING COMPANY**  
CLAUS SPRECKELS BUILDING      SAN FRANCISCO, CALIFORNIA







PORTRAIT  
*Frank Roshnell*

# CAMERA CRAFT

*A Photographic Monthly*  
SIGISMUND BLUMANN, EDITOR

*Claus Spreckels Building, San Francisco, California*

FOUNDED MAY 1900

VOL. XXXV

SEPTEMBER, 1928

NO. 9

## Motion Pictures in Natural Colors

By Dr. C. E. K. Mees

Director Eastman Kodak Laboratories

The way the process announced today makes colored motion pictures is not so occult as such a remarkable development might seem, yet it works by such microscopic neo-magic as only the methods of modern science can deal with. A phenomenon of the process is that the film itself contains no color at any time.

The amateur cinematographer's part has been made easy. He merely has to insert a "color filter" into his camera and thread his Kodacolor Film. But actually, when he makes color movies, without knowing it, he uses hundreds of lenses and he disentangles thousands of tenuous threads of light.

The many new lenses introduced into the process are cylindrical lenses embossed right on the film, composed of the film base material and extending lengthwise of the film. The lenses on the film are about seven times narrower than the tiny dots making up the illustrations in a newspaper, and as such they are invisible except under a microscope. They cover completely the surface of the side of the film opposite from the sensitive emulsion. That surface faces the camera lens, and the emulsion is away from the lens, contrary to the threading arrangement for ordinary film.

When the trigger of the camera is pressed, light reflected from the subject passes selectively through the three-color filter, on through the camera lens, and thence through the tiny embossed lenses on the film to the sensitive emulsion coating on the opposite side, where it records itself upon the silver compounds therein contained.

White light, as is well known, is composed of all the colors of the spectrum. This can be seen when white light shines through a prism, or when it appears as a rainbow reflected prismatically from the drops of falling rain.

The color filter is striped in the three primary colors of the spectrum—red, green and blue. The reverse of the fact that white light divides up into the colors of the spectrum, is that light coming evenly out from the three colors of the filter on a projector and superimposed on a screen, appears white.



But cover up the green and blue segments of the filter and the screen will turn red. Cover up the red and blue and the result will be green. Similarly, white light minus red and green, gives blue.

White light minus blue only, with the red and green areas both left for the light to shine through, gives yellow. White minus red gives blue-green. White minus green gives purple. Varying the areas of each color through which the light may shine, gives the infinite shadings between these colors. Black is the total elimination of light.

Out of the rays of light which spread like a fan over the filter from every point of color in front of the camera, the red area lets only the red fraction go through to the lens, the green lets only the green through, and similarly the blue excludes all but the blue. Kodacolor Film is panchromatic, that is, is equally sensitive to all colors. Through the camera lens these separated rays pass, each to be focused on the part of the film frame corresponding to the part of the subject from which it came.

Then the embossed lenses do their work. If there were no embossed lenses, the rays representing the three colors would converge on the sensitive emulsion as a single point and the film would become ordinary black and white, with no differentiation of colors on the film. But the embossed lenses guide the one or two or three rays falling upon each tiny area of the film and lay them on the sensitive emulsion in an orderly fashion, as three distinct impressions at any one spot.

Just as the camera lens spreads an image of the scene in front of the camera over the whole film surface, so each of the minute embossed lenses portrays, on the very small area of sensitive substance that it covers, the scene immediately in front of it—which is the camera lens as seen from that particular point on the film. Of course this means that the sensitive emulsion behind each tiny embossed lens will receive, not an image of the whole scene in front of the camera, but only a small bit of the scene, since any point on the film receives rays from only a corresponding space on the scene in front of the camera.

The three filter colors covering the lens are imaged behind each tiny cylindrical lens as three parallel vertical strips, because the tiny cylindrical lenses are parallel to the stripes of color on the filter. Thus, the width of each of the minute areas of emulsion is subdivided into three parts related to the three filter colors and affected by light that is able to pass through the colors. The sum of these invisibly small affected areas of film constitutes the whole photographic image.

A red ray from an object in front of the camera, for instance, touches the sensitive material of the film at a spot related to the red area of the filter. Developing by the "Reversal Process" in use for amateur movie films turns this affected spot into a transparent area, leaving opaque the adjoining unaffected areas related to the green and blue segments of the filter. Therefore, in this case, the projector light can shine only through the invisible small points of the film, which will send beams to the red projector filter and out to the screen as pencils of red light.

## CAMERA CRAFT

So also with the green and blue and with combinations of colors. The sum of the points on the scene containing red makes a photograph from red light on the emulsion areas related to the red filter segment, the sum of the blue also makes a separate photograph, and similarly with the green.

Then the projection. Recollect back to the explanation of how various colors are thrown onto the screen by covering up different combinations of filter colors on the projector. Well, that is just how Kodacolor is projected. The opaque areas of the film cover up, in effect, certain of the filter colors: they prevent the light from going through where it is not needed, by cutting off, at the film, rays which would otherwise pass out through the embossed lenses, through the camera lens, and through the filter color in question to the screen.

For any point on the scene, only the colors are permitted to be projected which blend on the screen into the corresponding original colors of the scene photographed. The pattern of these rays from all the cylindrical lenses on each frame projects a picture on the screen, with each ray contributing its speck of light to the color or blend of colors at one point.

The film itself is not colored. The colors of the subject are delineated, merely by transparency on the film or by black metallic silver deposited in various degrees of opaqueness, so as to permit light to shine through one of the three sections of the filter as directed by the tiny film lenses.

Despite all this difficult description, the most important fact about the new process is that henceforth amateur photographs can make movies in full natural color without giving a thought to the minute magic of the process.



*The Distant City*

*F. G. Mackintosh*



*My Husky Dog, "Prince"*

*G. M. Taylor*



# Photography in the Far North

By G. M. Taylor

(Illustrated by the Author)



When attempting a discourse on Photography in the Far North, I am reminded of the oft-quoted Mr. Samuel Clemens, who was giving a lecture on "India." "In the first place, ladies and gentlemen," he said, "I have never been to India." Likewise, I must say that I have never been to the Far North, by which I mean the Arctic Ocean regions. The district to which I refer, therefore, is not the true far north, even though to the jovial editor of *Camera Craft*, basking in sunny California, a thousand miles north of Vancouver seems quite a way, but I will attempt to give some impressions of a photographer in the Yukon Territory and Northern British Columbia, more particularly the Atlin Lake region.

This, once the Mecca for the old "stampedeers" of '98, is now the objective of thousands of tourists each year who journey in the comfortable coaches of the White Pass and Yukon Railway, over the old Trail of '98, from Skagway, Alaska, over the White Pass summit to the head of the Yukon River; thence down the river to Dawson and return, or perhaps continuing on down, making the "circle" trip by way of Fairbanks, and out via the Alaska Railroad.

But there are also many hundreds who take the trip into the lake district of Northern British Columbia. These vast lakes form the headwaters of the mighty Yukon River, which flows north and west for almost two thousand miles. Lakes Atlin Tagish and Bennett comprise a chain of waterways incomparable to any lakes in the world. These are all large lakes, Atlin, the largest, being about ninety miles long. Still, it is not their size alone, other lakes are larger; it is not entirely the wonderful snow-capped mountains and glaciers which surround them, for other lakes have higher mountains than these; but it is their vastness, their desolation, yet peace, their lonely friendliness, that to see them once is to remember them always. To live on their shores, summer and winter, is to love them more each year. Whether it be the smiling calm of their wonderful summer reflections; the angry blasts of late fall and winter, when the lakes rage like the ocean itself; or the dead bitter whiteness of winter's ice and snow, so cold, at times, that the air is literally "blue." (Then the lakes are most beautiful when viewed through the windows of some cozy cabin, with a good big wood pile beside.) But it is none the less beautiful at all times, and all of its phases present to the photographer an endless succession of invi-



*The Seracs; Llewellyn Glacier*

*G. M. Taylor*



*Mushing Along Over Snow Fields*

*G. M. Taylor*



*Winter's Menace on Atlin's Shore*

G. M. Taylor

tations. But I am supposed to discuss photography and not sentimentalize over the beauties of nature or scenery. If such information is wanted, it is better had from the railroad folders, whose language and imagination is more flowery than mine.

Photography in the Yukon is no different from photography anywhere else, except that it is a little harder. Among other things I am in the photo finishing business, and the town of Atlin, where I have my shop, is the first place that the tourists stop long enough to have films finished, many of them since starting their trips in California, Minnesota, New York, or even London or Australia. I am, therefore, able to compare the pictures taken farther south with those taken in the north, and I find that it is extremely difficult for the average amateur to catch the "Spell of the Yukon" in photographs. Most of the pictures are underexposed, though with the more common advent of faster lenses the other extreme is getting to be common. But invariably the pictures are flat. Most of the beauty of the north lies in the vast distances, and the soft and delicate colorings, all of which are photographically disappointing, particularly to the amateur. Whenever I get some especially good pictures I ask the person what kind of camera he used, and the usual answer is "Oh! Just an old box Brownie." This is a confession which I should not make, as part of my business is selling high-grade cameras; but I will make the confession even worse by saying that when anyone brings me films to finish and I see him carrying an expensive reflex camera, with a fast lens, I generally say, "I'm sorry, but I will not have time to finish your films before your boat leaves;



*The Mountaineers on a Glacier*

*G. M. Taylor*

## CAMERA CRAFT



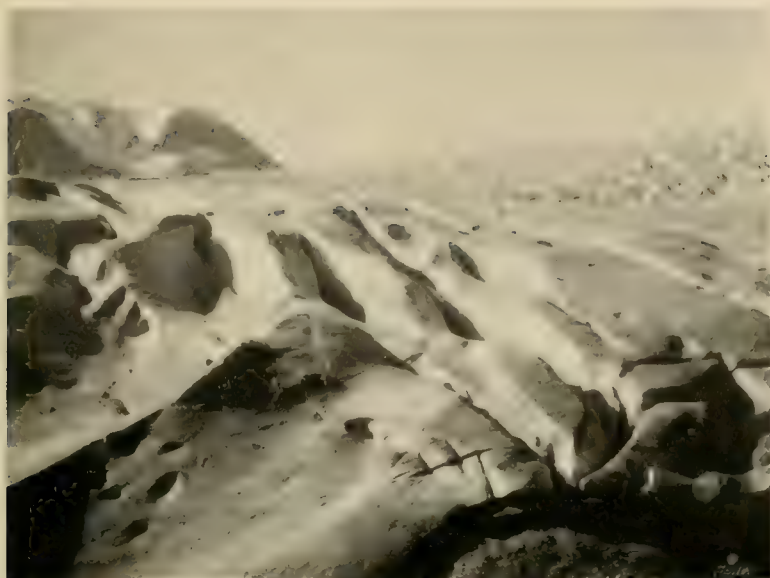
*West Bay from Copper Island*

*G. M. Taylor*

there are too many ahead of you." This is because, in general, these people expect more and get less than those with cheaper cameras. For instance, on one occasion I developed some cut film for a young fellow. They all went black in the developer, retaining just a faint suggestion of an image. I tried to make some prints, but gave it up, and handed the films to him when he returned. He was mad as a hornet and said he never saw such rotten finishing. With me, the customer is always right, so I agreed with him and said they were the rottenest films I ever finished. After a wordy battle I finally pumped him as to exactly what he had done, which was as follows: He had bought a brand new reflex camera, the first he had ever owned, and the salesman had sold him nothing but Super Speed Portrait Film. This he had exposed at about  $1/25$  sec. at  $f$ , 4.5 taking water scenes and distant mountains in the bright sun, giving approximately fifty times the correct exposure. You can imagine the result. So I fixed him up with some Commercial Ortho, and told him to shoot again at stop  $f$ , 22, and also showed him the use of a filter. The next day when he brought in his films I showed him some real results, and he was profuse in his thanks. He was only typical, though it is probable that most of those who understand the use of their high-grade equipment do their own finishing.

This brings me around to a discussion of the equipment I use for my work. My business is scenic and commercial photography, my hobby pictorial photography. For all serious scenic work I use a view camera,  $6\frac{1}{2} \times 8\frac{1}{2}$  or  $5 \times 7$ , with Commercial Ortho Cut Film. Sometimes for best results I use Panchromatic, but this is inconvenient, because of the difficulty of development, requiring absolute darkness, though a good panchromatic negative has wonderful quality. I always use a filter if there are white objects, such as snowy moun-



*Llewellyn Glacier at Its Best*

G. M. Taylor

tains or clouds, to be brought out against a blue sky. K3 is strong enough, but sometimes for impressionistic pictorial work I use a G filter, which renders the sky quite dark, and brings out the white with great contrast. For pictorial work I use a 4x5 long focus Graflex, with 8½" Verito (diffused focus) lens, which is convertible. This gives any degree of diffusion, from very soft to needle sharp, simply by stopping down, and the single lens element gives a long focus for good perspective. By using color sensitive film (pan or ortho) and a light filter I can usually take "snaps" without the use of a tripod, as 1/25 sec. at f 6 or 8 gives sufficient time for a brightly-lighted marine or mountain view.

One of the most beautiful, yet elusive and baffling, effects which is so frequently seen here in the north is the hoar frost. In the East it is most frequently seen in mild weather, generally in March. Here in the North it most frequently occurs in quite cold weather, 20-30 below. This effect occurs almost invariably just before the lake freezes, when the temperature is 20 or more below zero, and the water still comparatively warm. Vast clouds of "steam" arise from the lake, settling over all vegetation, which takes on fantastic shapes. But it is hard to photograph effectively, because the great cloud of steam allows no sun to filter through, and the light is diffused and flat. The accompanying print, "Winter's Menace," taken at just 12 noon, temperature 30 below, shows this cloud of steam, just veiling the sun, which scarcely clears the horizon at this time of year.

Most people would naturally think that a photographer in the North should spend most of his time photographing wild game. This he hopes some day to have time to do, but photographing game, even in the best of game

*Atlin Lake and Its Mountain Background**G. M. Taylor*

country, such as is this, is an art in itself, and requires months of patience. Sad to relate, the photographer must think of his bread and butter, much though he would like to pursue the elusive moose or mountain sheep. Trips into the game country are expensive, and game pictures just won't sell.

However, there is one kind of picture that does sell, and that is pictures of our far-famed husky dogs, for this is the land of "malamutes and moose meat." In Atlin we like to say there are about a hundred white people, two hundred Indians, and a thousand dogs. All transportation for six months or more of the year is dependent upon these animals. As a photographer I get my bit out of them as follows: When I find a group of tourists who are interested in the dogs, I suggest taking their picture with a real live dog team. They invariably fall for it, and I arrange with an Indian to hitch up his team and go out to a patch of snow-white alkali nearby, and "shoot" the tourists in groups of five or six sitting in the dog sleigh. Although in a way a "fake" picture, still the only thing faked is the snow, and the fact that it is taken in July instead of January does not render the dogs any less real. I always try to add a touch of realism by dressing my "victims" up in fur coats and "parkas." On one occasion I "shot" a party of 75 on a "Cook's Tour" from Cincinnati. With the help of the conductor this was so systematized that we ran all 75 through in less than half an hour. As the party was leaving that same night I hurried back to my dark room, finished the films, and had the proofs ready within two hours. Then I took the orders, collected the money (which amounted to over \$100.00) and said "good-bye" all within four hours of the time of taking the first picture.

# Black Light Photography

By HERMAN GOODMAN, B. S., M. D.

Illustrated by the Author.

Dr. Goodman is a member of the New York Skin and Cancer Hospital; of the American Medical Association; the Illuminating Engineering Society; author of "Care of the Skin in Health," and "Basis of Light in Therapy." He has been photographing medical and surgical subjects for many years both with still and motion picture cameras. Nothing he has done fascinates him as much as this new art, "Black Light Photography."

Taking pictures in the dark has an intriguing appeal to many. The x-ray picture is an example of such picture making. But there are other methods of black light photography which have an equally marked scientific value. Taking pictures with heat or infra-red waves is only beginning. The use of invisible ultraviolet for photography has been known longer, yet few have taken advantage of its possibilities. In truth, until very recently, the means of obtaining the "black light" has been limited to the nickel glass filter of Wood which has been of good service. But the Wood filter has been but a slight forward step into the invisible empire as compared with a series of new filters recently prepared though not as yet commercially available.

In this newest field of photography one requires an efficient source of short wave ultraviolet, such as mercury vapor arc in quartz; a filter which permits the passage of these short ultraviolet waves yet bars the visible light, and substances to be recorded on the film must possess the quality of being fluorescent.



*White Light*



*Black Light*

Fluorescence is a peculiar property of matter due to which radiation invisible to our eyes is made actinic. Fluorescence is quite like phosphorescence which is known to all of us in the illuminated watch dial. But there is a distinct difference. The watch dial begins to shine when darkness comes on, that is, retains visibility. Fluorescence takes place only while the invisible waves impinge on the substance. The difficulty, to date, has been to get the dark rays through and keep the daylight away so that our eyes could see the action. Thus, the illuminated numerals of the dial do not appear luminous in daylight, because the action of the radio-activity or phosphorescence on the substance of the dial is killed by the stronger daylight. Yet, that dial is doing its own little shining just the same.

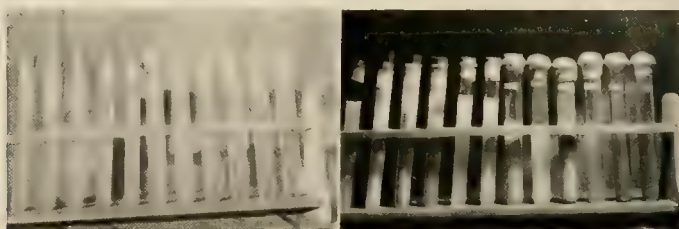


## CAMERA CRAFT

As stated the substances which we call fluorescent shine only as long as the activating rays strike them. If these rays are accompanied by visible light rays we cannot see the fluorescence. The problem has been to obtain a source of the activating rays minus the light rays. This has been possible recently.

It is an interesting fact, although little known, that all substances in nature fluoresce. But the transformation of short invisible rays to visible rays has not always been observed. Also, some fluorescence ranges from short invisible rays to long invisible rays, as when ultraviolet is transformed to heat. We have eyes which are not sensitive to either.

Using the illuminated dial again, we do not see the illuminated figures in daylight. Darken the room, and the figures and watch hands become visible. Now, if we place the watch within the zone of influence of ultraviolet the figures and hands of the watch dial show much stronger in the dark. We have added something to the rays.



*White Light*

*Black Light*

Our finger nails do not shine in the dark. No matter how long we may have been out in the sun, as soon as darkness comes we no longer see our nails. But in the black light of filtered ultraviolet our nails and our teeth shine whiter than any snow. Likewise, the gray hairs on our head shine with brilliant vividness. But, turn off the black light source, or let some daylight into the studio, and the shining nails, the brilliant teeth, and the searchlight hair, all disappear and gain their natural color again. If there is one false tooth among the natural set, that false tooth does not share in the brilliant white color of the invisible black light. That false tooth takes on a different color. It looks as if it were made of chocolate. Turn on the daylight and you cannot tell the false tooth from the rest.

The skin has its own fluorescence. Every person's skin shines in a different shade in the black light: A brunette's differently from a blonde's. Every little blemish which may be invisible in ordinary daylight becomes distinct. If there are freckles under the skin, they appear in this disclosing darkness. A whole series of skin diseases which may look somewhat alike in daylight take on opposite appear-

## CAMERA CRAFT



*White Light*



*Black Light*

ances in black light so that in his practice the skin specialist has in this new device a welcome tool for better service.

The black light is of great promise in the detection and in the prevention of crime. With this revealing black light one can tell counterfeit money from good. Alterations, no matter how cleverly done, can be seen at a glance. Papers which may look alike in daylight or in ordinary artificial light appear very different in this black light. In like manner substitution of one sheet for another in legal documents, wills, mortgages, etc., etc., could be told at once. This list may be extended into every field of human endeavor. Since it will be easy to detect such crimes, the temptation to commit them will be lessened. If the check raiser knows that his alteration will be revealed by the cashier before payment he will not attempt the art of raising checks. If the counterfeiter knows that every bill of any denomination is scrutinized under this crime detector, there will be less counterfeit bills made. The phraseology of one of our large city police departments "You can't win" assumes new significance. Insurance companies will reduce rates on bank and business protection if the bank or business uses this new black light.

The photographer will be called to make visible records of these new appearances of altered checks, wills, counterfeit money, shoddy cloth, etc. He will have to prepare by acquiring some knowledge of this invisible empire.

### GOSSAMER WEBS ARE FAIRIES' LACE

EMMA IRENE WERTS

*The Fairies have been this way  
And through the night whilst dancing  
Have left their trace  
In exquisite lace,  
The garden path entrancing.*

*Fairy feet have trod this way  
And through the night in passing  
Have torn their frocks  
On the Hollyhocks,  
Whilst all the flowers embracing.*

# "Well, I Tell You"

By Ted McIntire

"Well, I tell you," said Worley, the outside operator, to Curley, the laboratory man as they both sat on the finishing table in the work room after the day's work was over and a few late orders were drying on the boards, "the funniest thing that ever happened to me in the picture game was when I was working for a guy down in a little jerk water town in California." Worley was an operator that had worked in almost every studio on the coast, not very long in one place, rather short on cash most of the time, but always able to pick up a few dollars "kidnapping" when jobs were scarce.

Curley took in every word of this seasoned bulb squeezer, for Curley was a home town boy who graduated from the E Hard X printing school of Kodak amateurs.

Worley lit a home-made cigarette and settled down with his back against the wall and his feet upon the table. "Well, in this town there were a lot of Greek and Italian families, and if you don't know it, those birds always have a photo made when one of the family decides to quit living. They have the shot made with the deceased in a coffin and the whole tribe of relatives stand around it, sort of a farewell party. They prop the coffin up so the camera can see who's inside and make a sort of family group out of it."

"Gosh," said Curley.

"Well, the boss didn't like the idea of taking that kind of pictures so I used to get all that kind of shots. One day he says to me, 'Worley, go out to so and so and get a picture of the so and so family and of the expired.' So I packs up my old Eastman view and a flash gun and goes out to the foreign end of town. I found the house all right and sets up in the parlor to make the shot. The walls are very dusky so I loads up a mighty big flash.

"I gets the group lined up, lookin' pretty good so I figures everything is O. K. It was pretty tough focusing in that dingy room with a 25-watt lamp furnishing the sole illumination, so I half focus and half guess and stop the lens down to twenty-two, cap the lens and pull the slide. All set! I picks up the flash gun and gives them a little spiel about standing still, everything looks pretty and very solemn so I uncaps the lens and pulls the trigger and the flash. Ping! No flash—another ping and nothing goes off, so I shake the powder around in the pan and tries it again. Ping! and still the flash won't go off.

"Now I could never figure it out, but a guy in the movies getting socked with a gooey pie always gets a big laugh and a crowd having their pictures taken always get a big kick out of a dumb photographer



struggling with a flash gun that won't work. I hear a snicker out of this gang, and it makes me hot under the collar, so I gave the old trigger an awful yank and off went the flash! That flash was big enough to get detail in a nigger banquet in a coal mine.

"Well, I took the shot to the shop and developed it, not paying much attention to it, except that it was sharp and had plenty of powder. The boss used to do some of the lab work so he grabbed the negative and took it in the enlarging room and pulled it up. In about three minutes he came out with the print dripping with hypo. 'What in the Sam Hill is the idea of shooting a picture like this?' he asks.

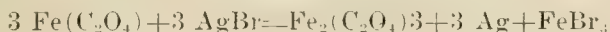
"I didn't answer but takes one look at the said photo—You should have seen it! Here's a group of mourning relatives around a coffin, all with their mourning clothes on, black crepe on their arms and a great big grin on each and every face."

## The Spent Developer

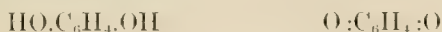
By J. G. F. Druce, M. Sc. (Lond.), R. Nat. Dr. (Prague), F. I. C.

The action of the developer on the plate is to bring out, by chemical action, the latent image in the exposed sensitive emulsion. The action of the chemicals in the emulsion on the developer is not a subject which has attracted much attention.

Photographic developers are mainly re-agents of an organic nature dissolved in water with inorganic constituents which modify (accelerate or retard) the action. Chemically, the simplest developer is ferrous oxalate and the effect of the silver salts upon this re-agent is to oxidize it to the ferric compound:



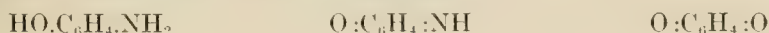
The more complex developers also undergo oxidization when used in development but the exact nature of the changes is known only in a few cases. Hydroquinone changes to quinone:



Solid hydroquinone is colorless and so are its solutions but a solution of quinone is deep yellow or brown and in the crystalline form it is yellow.

Pyro, i. e. pyrogallie acid, in solution readily absorbs oxygen, especially if alkaline, and an analogous change takes place when it is used as a developer. Nierenstein in 1915 showed that this product was also quinone to which he gave the name 2:3:2':3':2'':3''-hexa-hydroxy-tripheno-quinone. More recently, Homolka, in Eder's Handbuch for 1926 takes the view that there are several oxidation products formed and that they are not poly-hydroxy-compounds at all but keto-bodies.

Rodinal, the simplest developer containing nitrogen, is converted during development into quinone-imide and then quinone:



It is probable that *p*-phenylene diamine  $\text{NH}_2\cdot\text{C}_6\text{H}_4\cdot\text{NH}_2$ , behaves in a similar manner.

Metol, whether used alone or in conjunction with hydroquinone, is employed more than any other developer and Kropf showed in 1913 that, in the absence of sulphite, it too gives quinone but when sodium sulphite is present it yields a sulphonic acid.

As has already been pointed out in CAMERA CRAFT (1925, xxxxi, 334), amidol gives rise to complicated safranine derivatives which can be further used for desensitising exposed plates.

Regarding the inorganic constituents of developing solutions Schilow and Timtschenko in 1913 showed that sodium sulphite could act as the acceptor for the oxygen, handing it on to the organic constituent during development. These experimenters showed that other mild reducers such as sodium arsenite, hydrazine and hydroxylamine can be used in place of the sulphite.

## Lecture Notes on Photography

By Professor Edwin A. Sperry

Pei Yang University, Tientsin, China

Illustrated by the Author

(Continued from February Issue)

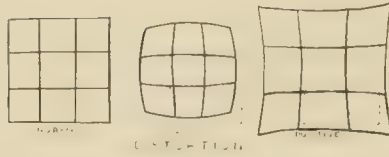
### *Distortion*

The term DISTORTION is used to designate the deformation of an image whereby the lengths of radial lines on the picture plane are decreased or increased in a progressively increasing ratio as to the distance from the center. That is to say, any points in an object at different distances from the center will not appear in their true relative distance from the center of the image formed.

In the use of lenses in earlier times it was found that by placing a diaphragm in front of the positive meniscus lens, the spherical aberration could be partly corrected. In doing this it was found that distortion of the image was considerably increased. This is explained by the use of the diagram.

From the diagram it is shown that if the diaphragm is placed in front of the lens the distortion is negative or that the radial points decreased in distance in an increasing ratio. It was also shown that if the diaphragm be placed behind the lens, or between the lens and the image, the distortion reversed its character and became positive. Owing to this fact it can be readily seen that if the lens is composed of two systems, either simple or compound, which are separated from each other by an air space and the diaphragm is placed between them, the two opposite distortions will neutralize each other and give a perfectly normal image.

## CAMERA CRAFT

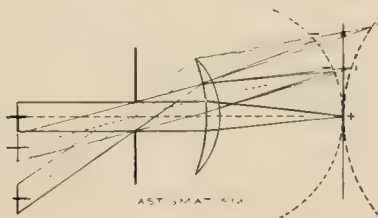


Acting on this principle the Rapid Rectilinear lenses were designed and, inasmuch as the two systems were so constructed as to correct spherical and achromatic errors and, to a considerable extent, the curvature of the field, by the use of this form we have the first four of our aberrations almost entirely corrected. As a result of this general correction it was possible to use a much greater area of the lens and still hold these corrections which made it possible to give a correspondingly greater illumination to the image. This is the reason for the name "Rapid Rectilinear."



### *Stigmatism*

Astigmatism is caused by rays of light passing through some portion of the lens where the radius of the spherical surface is less in one direction than in the other thereby giving it a slightly cylindrical form. As a direct result of this, the focal distance which would bring a line lying in one direction into perfect focus, would not be the same as would bring a line lying in another direction into sharp definition. This defect is more clearly noticed in the outer margin of the image or where the rays pass through the lens at a considerable angle.



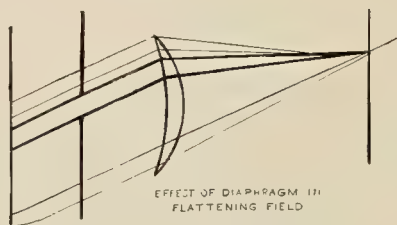
Turning to the diagram it will be seen that any plane passing horizontally through a sphere in any position except in that in which it passes through the center, the diameter of the circle bounding the edges of the segment is smaller than the diameter of the sphere. Again, if a vertical plane intersects this plane and also passes through the center



of the sphere it will have a diameter equal to that of the sphere. Assuming that these planes consist of rays of light it will be readily seen that those in the horizontal plane will have a correspondingly shorter focal length than those in the intersecting vertical plane. Owing to this cylindrical form which as can be seen, increases very rapidly as the edges of the lens is approached, it is impossible to bring any point of light to a perfect focus after passing through this portion.

If the rays of light coming from an object composed of vertical and horizontal lines pass through such a lens, the horizontal lines will have a focal distance much shorter than that of the vertical lines owing to the stronger horizontal curvature of the refracting surface. This will generate two curves through the loci of the two focal distances for each and every image, as shown in the diagram.

It might appear that if the image plane be made perfectly flat, as in the Rapid Rectilinear lens, these curves might be harmonized, but this is by no means true. The result of flattening the surface of the plane is merely a compromise between the two astigmatic curves and gives a plane of the least confusion but will always lack perfect definition.



The method of correcting astigmatism is by using a system of elements with a sufficient number of curved surfaces to allow one or two of them to be designed in such a form as will overcome this cylindrical effect. This cannot be done perfectly by the use of two elements but three elements are often used, giving perfect correction but in the most perfectly corrected lenses of the highest grade, each system is composed of four or more elements.

In designing these higher grade lenses it is commonly the practice to use two compound lenses separated from each other by an air space, in the same manner as in the Rapid Rectilinear lens, in order to increase the illumination and more perfectly correct distortion. These two systems are sometimes made with the same focal distance but in some cases they have different focal distances which makes it possible to use them in combination or singly, thereby giving three different focal lengths which is very useful at times.

There is another type of Astigmatic lens made in which the two systems used are totally unlike and cannot be used singly. These are

also highly corrected and are somewhat simpler, having but four or five elements in all which avoids the absorption of light, which occurs in the use of a larger number of elements, and allows of considerably greater illumination, making these lenses very rapid. This is the type used in the cameras by which moving pictures are taken as this class of work demands the very greatest possible speed.

Besides these five aberrations or defects there are several others which, while they are the cause of imperfect images, cannot be considered as being optical, but are purely mechanical or, perhaps we might say, constructional. Of these the two which are the most troublesome are: FLARE SPOTS and UNEQUAL ILLUMINATION.

#### *Flare Spots*

It often occurs in taking a photograph that some very bright spot in the object appears as repeated images on the plate. For example, if the camera is pointed toward the sun, it will be duplicated at various points on the ground glass. The duplicated images will not appear in focus but as bright areas, considerably flared, and are at times quite clearly defined.

This is caused by the internal reflection in the lenses which are used in making up the combination. It is a well known law of optics that even a very clear and transparent medium will not absorb the entire ray of light but that a certain proportion of the ray will be reflected. This is specially true where the ray strikes the surface at an angle and increases with the increase of the angle.

This is quite as true of a ray passing from a denser into a rarer medium. On account of this, the ray passing into a lens will be partly reflected from the rear surface back to the front surface and again be reflected to the rear surface, and a portion will then pass on through this surface toward the plate behind the lens. This series of reflections will, of course, cause the focus of the reflections to be different from that of the original image and will thus form a flared area instead of a perfect image.

To prove this a simple experiment can be tried. Place the camera in position so that the image of a bright lamp light is perfectly focussed on the screen and then move the screen closer to the lens until the secondary focus is found and the image of the lamp will be very clearly defined.

These flare spots are not uncommon to the cheaper grades of lenses but in the higher grades the curvature of the surfaces of the various elements in the combinations are so designed that they will distribute the flare over as large a surface as possible and thus diffuse them. No lens is entirely free from these reflected images and those combinations using cemented members are more free from them than those which are made with air spaces between the individual lenses. In the cemented lenses, however, these elements must be much heavier or thicker and as

all glasses absorb a certain amount of light, which is not transmitted, the loss from this source often more than makes up for this advantage. The direct result of these flare spots is that the image and plate are more or less dimmed or fogged, as it is termed, and it is on this account that some lenses which are constructed so as to decrease this defect give so much greater brilliancy than those which are not so corrected.

## Simple Sensitizers For Linen, Muslin and Silk

By Dr. H. O. Mead.

This is going to be just plain meat without sauce or trimmings. The facts are what you want and you shall have them, tersely.

Wash your material, whatever it be, in Ivory Soap, or any of the powders guaranteed not to fade colors. Dry and iron with a moderately hot iron.

Stretch the goods over a clean glass plate and baste the edges which you will have turned over to maintain tension.

Paint the sensitizer on with a rubber-bound camels'-hair brush and smooth to an even coating. Cut the basting threads and hang to dry in a normally warm dark closet.

Print according to the formula you have used for sensitizing and develop and fix as directed.

If to be used for cushions or wherever flexibility is essential you have completed the job. If to be framed paint a white cardboard with Higgin's Photo Paste or vegetable glue or any other reliable photo mountant and put the print on the card working from ends and smoothing quickly before the moisture soaks through the texture and causes cockling. Turn the ends of the cloth over and paste to back of card.

### Blue Print Sensitizers

Any of the standard formulae are good, but for those who have none at hand the following is as good as any. It is from the Workroom Handbook:

A. Citrate of Iron and Ammonia.....	120 grains
Water .....	1 ounce
B. Potassium Ferricyanide .....	105 grains
Water .....	1 ounce
C. Oxalic Acid .....	30 grains
Water .....	1 ounce

These solutions will keep in separate bottles and the sensitizer should be mixed about an hour before using and allowed to assimilate.

To use, take ten parts of A and ten parts of B and from four to six parts of C.

Print till a grayish green image is visible on the yellow ground and develop in plain water which must be changed till there is no coloration in the wash and the whites are clear.

### Sepia Print Sensitizer

On page 242 of Photo Miniature, number 185, John Tennant gives the following which he heads Blumann's Sepia. It is splendid for broad effects and large subjects but rather sketchy for detail.

Soak any hard gelatine in enough water to cover it for about twelve hours. Six grains of gelatine will be about right. Then add water to make



## CAMERA CRAFT

one ounce; bring to complete solution in a double boiler with gentle heat. When somewhat cooled, but not cold, add in the order given:

Tartaric Acid .....	8 grains
Silver Nitrate .....	9 grains
Citrate of Iron and Ammonia .....	40 grains

This may be coated by ordinary illumination but should be kept from daylight or strong electric lights. Filter through absorbent cotton and keep in brown bottles. Coat in the usual way and print by diffused daylight.

Develop in plain water as for blue prints but fix in the following for a matter of three to five minutes. The color is determined in the fixing bath:

Water .....	2 ounces
Hypo .....	25 grains

Wash thoroughly and dry.

It might be well to know that the sensitized product, like most of the sensitizers containing iron salts, does not keep many days and should be wrapped face to face. Also that development must immediately follow the printing for light action continues even in absolute darkness.

Finally the reader will be happy to learn that all the invaluable formulæ for Kallitype given by James Thomson in the Photo Miniatures devoted to that subject may be used on white linen or muslin, and some of them on colored fabrics, including silk. Furthermore, iron and silver prints may be toned in any of the gold or platinum toning baths and become by that treatment almost indefinitely "permanent."

The Photographic Workroom Handbook, on pages 38, 39, 40 and 41, has given me many formulæ that worked well on cloth and the little paragraph on Toning Kallitypes (page 41) opened up a vista of experimentation that led to various effects and a diversity of experiences.

### ON THE HEIGHTS

WHERE JOAQUIN MILLER LIVED

By SIGISMUND BLUMANN

*Who heedless treads Parnassus' heights  
Knows not what gods existed there;  
His but the annals of the scribe,  
The written page or legendary lore.  
These wot not of the deities unnamed,  
Unsung that quicken, live their while,  
And pass away with each man's muse  
Who can invoke supernal things.*

*To him whose grosser self divest  
And naked souled climbs up the slopes  
Armed with a living rod, Mosaic like,  
Smiting on barren rock, there gushes forth,  
Still once again the dried Pierian spring.  
It was not there before, it is not now.*

*The master mind ruling the master hand,  
Plants here a tree and there a flower rare,  
Carves out a form, or limns an outline, say,  
Writes him some words, or makes a tune,  
And beauty has its birth,—Pegasus flies.  
Bright light reveals the Golden Flame once more  
And any hill becomes Parnassus.*



*Portrait*

*Gerhardt Sisters*

# Camera Work of Moving Pictures For the Amateur and Professional

By Ernest M. Reynolds

Illustrated by the Author

(Continued from the August Issue)

## THE MAKING OF A FADE

A very common effect produced many times in the average feature picture is that which is termed "fading." There is the "fade in" and the "fade out." The effect is just what these two terms signify. The fade in has the appearance of the entire screen brightening up from total blankness to the normal density of film; while a fade out causes the picture to gradually grow darker until there is nothing to be seen. The footage required to obtain this effect is variable however, and it seems that four feet of film has been accepted by the leading producers as gaining the best results. These fades are usually made with the camera in operation. High-grade instruments have a locking device upon shutter, effective when the camera has been completely closed. This is a safeguard in many ways. At present there is only one practical way of fading, that is, by the use of a dissolving shutter. As mentioned before, this consists of two movable blades, adjustable while the whole affair is rotating on the shutter shaft. By closing the opening in the shutter, using these movable portions, the exposure is decreased, causing the scene to grow darker until completely invisible. Starting with a closed shutter, a fade in is made by gradually opening the blades, until the maximum exposure is reached. It is highly improbable that the amateur camera will be fitted with a dissolving shutter, due to the added cost, which is considerable. For all practical purposes, at least for the amateur, there is a way which will yield nearly the same results. It is easy to see that if the iris of the lens is closed down to where the minimum of light is allowed to pass through, it is quite likely there will not be enough light thrown upon the film to affect it photographically.

Acting upon this theory, the iris of the lens may gradually turned, either opening it or closing it, and the results will be quite like that of a fade in or fade out. A small handle or rod fastened to the iris ring of the lens, will assist very materially in this operation. There is also what is known as a chemical fade. This is done in the laboratory and by an expert as the negative is given a special treatment. The process is to chemically wash away gradually some of the density of negative, increasing the clearing effect to a point where the image is entirely washed away. This is done at a point in the film where a fade has been found necessary.

## THE MAKING OF A DISSOLVE

The dissolve is a much used effect and nothing quite takes its place when an artistic touch is needed. To all appearances, one scene literally dissolves into another, leaving no decided jump or flashing of scenes. The effect is easily obtained and, after a little practice, very pleasing and professional results are possible. The dissolve is made up of a fade out and a fade in, except that after the fade out has been made, the film is backed up in the camera to the point at which the fade out was started. At this same point begin the fade in, thus lapping over the fade out. The result will be a dissolving of the two scenes. A very prevalent use of the dissolve is to show a long shot or distant view of a subject or scene, then dissolve to a closer view which brings up the detail.



## TITLE MAKING

The making of titles is an important branch of the industry and one which calls into play much in the way of art. Two methods are used in title making, namely, the direct and the indirect title. The direct is made by placing the reading matter upon the positive in one operation. A white card is printed or hand-lettered with black ink. This is photographed by a camera which is loaded with positive film. An important feature to remember in making titles in this manner, is that the film must be placed in the gate of the camera with the emulsion away from the lens, which is just the opposite to negative threading. When this positive is photographed and developed, it will be found that the white card is black and the black letters white, and when dry is ready for projecting.

In this method of title making only one copy is possible, unless the card is kept and rephotographed. It is necessary to patch in these titles and naturally, this process has its disadvantages. For single copies of titles it is cheaper and for all practical purposes will answer very well. The other method of title making, the indirect, is more practical, especially when a number of copies are desired. In this, a black card with white lettering is photographed upon negative stock and developed as usual. This will give what is known as a negative title. Usually this negative title is connected to the picture negative and all printed together, thereby leaving no patches between the title and picture. This is far the better way for a number of reasons, principally because of the elimination of patches in the positive, which in turn prolongs the life of the film to a great extent, also it is less labor in printing a number of copies, after the negative assembling has once been accomplished.

It is rather difficult to set down a definite rule as to the footage used for titles. A regulation much followed in the industry, is a foot of film for every word used in the title. This, however, can be shortened to suit the occasion, if a number of short words are contained in the title. The titles for feature pictures are always made in negative form and then assembled with the picture negative. It has probably been noticed that a number of titles contained in feature films have drawings, together with the titles. These illustrations were made upon the same card with the lettering, difference in the shade or tone of black and white being controlled by the artist in his use of the black and white inks. Many beautiful effects are made possible by the use of double exposure in title making. This is the simplest form of the dual exposure, but not always the easiest. A black card with white lettering is photographed as usual, then the film rewound in camera with shutter or lens closed, until the film is back to the point at which said title was started. Then a drawing or painting or photograph is placed in front of the camera in place of title card. The iris of lens should be closed to a very small opening so as to under-expose the second exposure, thus producing a dim background for the title, and at the same time not make it brilliant or noticeable enough to interfere with the title reading matter. This background or second exposure may fade in and fade out to give action to the title. It must be kept in mind that in order to make a consistent title the background and title matter should have some connection. In this manner many effects are produced which would otherwise be nearly impossible.

From what has gone before it might be taken that only negative stock can be used for negative or indirect title making. This, however, is not true for positive film may be, and as a matter of fact is, used a great deal. From a monetary standpoint this is much the more economical, the cost being less than half that of negative. Many people, however, prefer to use negative stock, especially when there is considerable in the way of art work upon the title as negative will give much softer tones to the background. It is quite

impossible to set down given rules for exposures in this branch of the work. Title work may be made out of doors as well as inside, so it is obvious that the exposures will vary a great deal. Probably the surest way to determine the exposure is to make a few tests, each a foot or two in length, and have them developed. The most practical arrangement for photographing title work is to use two lights, one each side of title board. The Cooper-Hewitt or mercury tube lights seem to be used quite generally for studio work. However, two large blue electric lamps have given fair satisfaction for title making. A caution is here emphasized and it will be well to note it carefully. In title making, and especially in double exposure work of any kind, use great care in setting the camera upon a firm foundation, otherwise a slight vibration or movement of any kind will cause the title or background or both to be unsteady upon the screen. This is very annoying and about the height of carelessness. When one realizes the tremendous magnification used to project this little film it will be easy to see that any slight movement of the camera will register many times greater upon the screen. A common cause for unsteady pictures is a looseness caused by wear in the tripod head. This can be overcome to a great extent by careful examination of tripod and especially the tilting device. Usually there is an adjustment by which the play can be taken up readily.

## Law For the Photographer

By M. L. Hayward

### THE VERBAL EVIDENCE RULE

If a photographer delivers a note or other negotiable instrument to B, payable in three months, and B sues, the photographer cannot prove that at the time the note was given there was a verbal agreement that it was to run for 4 months. This is a simple statement of the familiar legal ruling that a formal written document cannot be varied by verbal evidence.

Suppose, however, that the photographer agrees to sell a piece of real estate to B, and B demands security that the deed will be delivered.

"I'll give you my note for \$1,000, that you can hold until the deed is delivered," the photographer suggests, B accepts the note, later on the photographer delivers ahead of the land according to agreement, and then B sued the photographer on the note.

"The note was given as collateral security that I would deliver the deed. The deed was delivered, and that cancels the note," the photographer contends.

"That's varying a written document by verbal evidence contrary to the rule," B objects, but in cases like this the law is in the photographer's favor.

"Verbal evidence is admissible to show that the delivery of the document was subject to a condition that upon certain events the contract should not be binding," says the Iowa Supreme Court in laying down the rule, and there are Colorado, Connecticut, Illinois, Maine, Massachusetts, Minnesota, New York, Tennessee, Virginia and Wisconsin rulings to the same effect.

CAMERA CRAFT



*First Award*

*H. Kira*

*Advanced Class*



# CAMERA CRAFT



ADVANCED

SEPTEMBER



Second: M. A. Obremski  
Fourth: Franz Pfennigbauer

Third: H. S. Kaito  
Fifth: H. J. Hara

## SEPTEMBER COMPETITION

### Advanced

Dr. F. Adelbert  
Ernest Aftgut  
G. Bertelli  
Miss S. Bonn  
Mrs. Inman Collopy  
Dr. Albert Creiz  
Henry Dittmyer  
P. Eigeman  
T. Furuya  
Michael Graney  
Anton Gregorvitz  
Adolph Gutman  
H. J. Hara  
Isidor Heilman  
Rudolph Hiller  
J. T. Itsui  
Dr. M. Jepson  
H. S. Kaito

Hiromu Kira  
J. S. Kramer  
Homer Little  
J. I. de Miranda  
M. A. Obremski  
Dr. Matthias Olinda  
P. Fr. Pfennigbauer  
O. Remsen  
Frank L. Rogers  
Josef Shainwoelf  
Dr. Max Thorek  
Henry Ullman  
Dr. F. Umlauf  
H. L. Voelker  
Otto Weil  
I. M. Welland  
Mrs. V. L. Younger  
Prof. A. M. Yanger

CAMERA CRAFT



*First Award*

*Anne K. Bennett*

*Amateur Class*

# CAMERA CRAFT



1  
S  
E  
P  
T  
E  
M  
B  
E  
R



Second: Edward Alenius  
Fourth: T. K. Tsukane

Third: Vincent Orlando  
Fifth: O. W. Conrath

## SEPTEMBER COMPETITION

### Amateur

George Adhar  
Edward Alenius  
O. Anderson  
Howard Atwood  
Angelus Avedano  
R. A. Barber  
Miss Aime K. Bennett  
Harold Benson  
Jean R. Borchers  
Harry Carey  
Miss Phillipa Charlton  
Edwin B. Conner  
O. W. Conrath  
Miss Margaret Dean  
Mrs. W. F. Eldridge  
Fred Goerner

Dr. H. P. Gorman  
Dr. Thomas Halton  
H. J. Hard  
George McG. Hayes  
M. F. Hotchkiss  
Miss Josephine Isman  
J. G. Johnson  
I. Katish  
Miss Thelma Lafferty  
Dr. George P. Lake  
C. J. Lim  
Miss Ida Manheim  
R. Martin  
V. McLean  
Mrs. E. B. Meyer  
Clark Mills

J. E. Nagy  
Miss J. Nevers  
Vincent Orlando  
Kante G. Palm  
J. G. Purple  
Rene L. P. Raoul  
Vira Schebner  
George H. Sowers  
H. G. Tieuken  
T. K. Tsukane  
S. Tsutsui  
Mrs. F. V. Upton  
Miss Louise West  
L. A. Whitford  
Miss Winifred Wolcott  
Frank Yelland



## THE AWARD WINNERS AS THEY LOOK NOW

If the cash prizes were to be awarded tomorrow it looks as if the judges should have a hard time deciding whether the money should go to Chicago, or stay here in San Francisco. And the silver cup at present likewise is hovering between the Chicago Camera Club and the Japanese Camera Club of San Francisco.

The Vienna Camera Club of Austria, after winning two silver cups, thanks to Mr. Aschauer, has gracefully retired for reasons given by the gentleman named: "I feel that two cups already won make it immodest for me to continue submitting without seeming to hope for and wanting to win another."

A number of the best workers write that they much preferred the older way of monthly awards and prefer a medal to cash prizes. We were induced to try the cash prizes by several correspondents, and if the consensus of opinion is that we return to monthly awards and medals, why we shall return to that.

There are several very prominent clubs that have been conspicuous by their absence. This is regrettable, for the silver cup is a beautiful work of art, made by the Shreve Company, and would grace any club-room, and besides the company in which competitors find themselves is worthy. Dr. Max Thorek, Franz Pfennigbauer, M. A. Obremski, H. Kira, Tomahisi Furuya, Alma Laven-son, Edward Alenius, Vincent Orlando, Mrs. W. F. Eldridge, T. K. Tsukane, E. A. Nievera, Horace Tyzack, C. E. Lamphere, W. A. Watson, Jose Villalobos Franco, E. B. Meyer, T. Noguchi, Margorie Bentley, John T. Matsuda, Willard Van Dyke, Dr. Ralph Seobey, Miss Y. Inagi, Allen Fraser, Louis R. Murray, H. S. Kaito, Baroness Chiari, J. C. Youenes, A. S. MacFarlane, Frank J. Calabria, Aage Remfeldt, Dr. J. B. Ochsner, A. Blackie, Alexander J. Krupy, B. J. Westinghouse, Torfinn Michaelson, F. L. Owen, Lock Shing Hong, are in the running for the cash awards. They are pictorialists that have proven their standing frequently and in other places.

There are four months still to go. Come in, you dilatory clubs. Prod your best members to bring home the cup. Make up in numbers what you have lost in time.

In the meantime we should be grateful to the winners named above if they send in the title of the club with which they are affiliated. Remember it is required that the individual be a paid-up member of the club to be accredited. If you belong to two clubs we are good fellows and will credit you to both. This will take you off the horns of a dilemma.

The richest of you will probably welcome fifty, or twenty-five, or even ten dollars around Christmas time. Our check shall be mailed to reach you in time to spend for the holidays. Now, will you be good?

Remember, there are no conditions, or coupons, or formalities. Send your prints with name and address on back. If you want them returned enclose stamps in the same package. That is all.



## SEPTEMBER

In many parts of the world this month brings faint suggestions of Autumn. A ruddiness blooms on leaves erstwhile bright green. The wind blows with an access of assurance and is not so polite. In the northern part of our continent the mountain resorts are closed, the windows boarded up and you should find ice, thin and brittle, but ice, on the surface of the pools in and about the grounds or gardens that bloomed so few weeks ago.

September is a beautiful month. I recall saying the same thing in various places of other months. Others have said it of various months. Let me at this time say every month is beautiful if we can but make it so. Comes to mind Gilbert's jingle: "There is beauty in the bellow of the blast." There is if you are attuned to it.

Notwithstanding the following optimistic verses, you are not to think the writer is always happy, always philosophical. Sometimes rich food, sometimes over-rich persons obtrude and intrude upon him, sometimes just innate cussedness deranges the old liver, and my own pipe offends me as it does those about; the good dog (gone these dozen years) cannot console me, and for lack of inner content the world is all awry. What does that prove to you? What it proves to me in better hours: That life is really a matter of temperament, point-of-view, condition of liver, and such.

The Creator has put within us the completest equipment for enjoyment, happiness, philanthropy, and health. With the Divine Gift came Option. In a word, it is up to us. We can be happy if we will.

### INNER CONTENT

When the wind is on the mountain,  
And the rain enmires the moor,  
With each eave a plashing fountain  
And the storm outside the door,

It is good to sit a-dreaming  
By the blazing log, and see  
Old friends, if but in seeming  
Their dear faces come to me.

Good old pipe, with bowl a-glowing.  
Good old dog, beside my chair.  
What care I for winds a-blowing,  
When within it is so fair?

So with life and all its sorrows,  
If we only know the way.  
So with all portentous morrows,  
And with each engloomed today.

All the world is quite outside us:  
Life itself is not the goal,  
If we keep alive within us  
A contentment of the soul.

## CAMERA CRAFT

If you could see me as this is written you should find little of smug content or complacency on my face. I am wishing I could be more deeply impressed, more permanently influenced by my own words. But I believe that is common enough. We all preach better than we practise. The truth of the matter is the important thing, and the writer doesn't count.

And so the following verses are not a bid for a halo, but the product of a mood—a sincere moment, if you please.

### PHILANTHROPY

There is something of God's own leaven  
In hearts that are good and true:  
And joys endure  
In soul-thoughts pure,  
As only the pure ones know.

There is always a bit of heaven  
In the good things you may do  
For the friends you meet  
In the home or street,  
Or wherever you may go.

There is joy in the art of living.  
Each day has its own device.  
And the patterns there  
May be dark or fair,  
But we make them with our will.

There is something in the giving,  
Though it be at sacrifice,  
And though we lose  
What most we choose  
To keep, it's pleasure still.

### WILFRED A. FRENCH, Ph.D.

#### Editor, Scholar, Gentleman

He was young when photography was in its youth. They grew up together, and did much for one another. In their progress they did much for mankind.

The scholastic attainments of Wilfred French did not chill his human kindness, nor could approaching age diminish his amateur ardor. He loved his kind, he loved his art, and he loved his book. Most of all, he loved his magazine, Photo Era, not as a matter of business, but rather that by it and through it he could reach more men of his own sort and maintain a contact with more of his friends.

Of friends he had more than most men. He loved generously and was generously loved.

On Saturday, August 4th, of this 1928th year of our Lord he passed away in his summer home at East Jaffrey, N. H. He leaves a great vacancy in this world, and while those who were closest will grieve the most, thousands in all parts of the world will be saddened deeply and feel the loss.





### Experts Define Good Amateur Film

The largest collection of amateur motion picture films ever assembled is now being studied by a committee of motion picture experts with the aim of ascertaining the progress which has been made in the non-commercial side of motion picture making, of establishing the standards which are representative of present day amateur films and of appraising the trend of the national amateur movie movement, according to Amateur Movie Makers, the magazine of the Amateur Cinema League, which represents the organized amateur filmers of the world.

This symposium is being conducted by the league in co-operation with Photoplay Magazine, the films under consideration having been assembled as a result of a national contest for the best amateur films yet made recently conducted by Photoplay in which awards totaling \$2,000 were made for the prize winning films.

A monograph setting forth the findings and observations of the cinematic experts who are conducting this study is expected to result, and such a critical discussion of amateur filming is expected to constitute a valuable guide in artistic development of non-commercial filming, and an important aid in the definite growth of the cinema as an independent art medium. The committee is stressing particularly the study of the photography, the cinematography, continuity, and the freshness of idea displayed in the films under consideration.

The committee includes: Kenneth W. Adams, writer and former technician of Famous-Players-Lasky; J. M. Fisher, film critic and member of the Will Hays organization; Arthur L. Gale, photoplay consultant of the Amateur Cinema League;

Professor Carl Louis Gregory, F. R. P. S., motion picture editor of The Camera Magazine; Walter D. Kerst, A. C. S. technical consultant of the Amateur Cinema League; Herbert C. McKay, A. R. P. S., Dean of the New York Institute of Photography and motion picture editor of Photo Era Magazine; Carl L. Oswald, author and authority on photographic processes; John W. Scott, technician of the Eastman Kodak Company; Frederick James Smith, managing editor of Photoplay Magazine; Stanley A. Tompkins, authority on cinematographic processes, and Roy W. Winton, managing director of the Amateur Cinema League.—Amateur Cinema League Bulletin.

### Dramatizing the School Curriculum

For twenty years it has been the dream of educators that the motion picture could be harnessed for the school room. Many experiments have been made.

It remained for the School Division of The Neighborhood Motion Picture Service of New York to stay with the job long enough and to employ a staff sufficiently versed in both the cine and pedagogic arts, to be able to announce the virtual completion of this long awaited contribution to education.

Eight school courses are comprised in their announcement by such men as G. Clyde Fisher of The Metropolitan Museum of National History, Professors Stull, Smith and Brewes (Harvard), Professor Meister, College of the City of New York, Director Gruenberg of The American Association for Medical Progress and other experienced educators. F. S. Wythe is editor of the series. The films are all accompanied with lesson plan for the teacher's guidance.

### Cleaning Motion Picture Films

The Eastman Kodak Company Research Laboratory, through J. L. Crabtree and H. C. Carlton, released findings on the above subject which will be of the greatest value to professional as well as amateur motion picture makers. Dirt to be removed and removable is classed by these scientists under three headings: 1, Dirt on the base or shiny side of the negative or positive; 2, Dirt or grease which may accumulate on the negative film during development; 3, Dirt and oil which accumulates on positive film during projection.

The cures are given under similar segregations as follows: 1. When proceeding in the laboratory by the reel and tank system, if all excess water is not removed from the film previous to drying, any dissolved salts present in the water supply remain on the film after evaporation of the water. The residual salts are usually only visible on the base side of the film because on the emulsion side they have an opportunity to diffuse within the gelatin coating during drying.

It is necessary to clean the back of the dried film either by wiping with a damp chamois while on the drying reels or by passing the film through a cleaning machine. Such treatment is unnecessary in the case of positive film if all excess water is removed previous to placing on the drying reel by thorough wiping or squeegeeing.

In the case of negative film it is customary to wind it with the emulsion side downward on a wooden drum covered with cloth when the base side may be cleaned without danger of injuring the image. The cloth should be removed from the drum at frequent intervals for cleaning.

A suitable cleaning liquid for the above purpose should possess the following properties:

(a) It should be capable of dissolving traces of inorganic salts and should also dissolve or emulsify grease and mineral oil.

(b) It should be sufficiently volatile and should not cause the gelatin side of the film to swell in a period of several seconds if it accidentally has access to it.

(c) The liquid should not affect the physical properties of film with safety or nitrate base or remove the color from film with tinted base.

A suitable mixture fulfilling the above conditions is the following:

	Metric	Avoir.
Ammonia (Conc.) .....	5 cc.	2-3 oz.
Water .....	95 cc.	12 oz.
Denatured alcohol (see below) to make.....	1000 cc.	1 gallon

The ammonia serves to emulsify any traces of grease or oil while the mixture contains sufficient alcohol to prevent dangerous swelling of the gelatin if any of the mixture reaches the emulsion side of the film.

A choice of several alcohols for preparing the above liquid is available as follows:

Drain alcohol (ethyl alcohol)—This is the most satisfactory for the purpose since it has a minimum effect on the film base.

Denatured alcohol—Ethyl alcohol is available containing a variety of denaturants. The most common denaturant is wood alcohol, which dissolves nitrate film base so that this should be avoided if possible.

The most commonly available denatured alcohol is motor alcohol. The "Pyro" brand of the Industrial Alcohol Company is prepared according to the following formula, No. 5 of the U. S. Internal Revenue Bureau:

Ethyl alcohol .....	100	volumes
Wood alcohol .....	2	volumes
Kerosene .....	0.5	volumes
Pyridin bases .....	0.25	volumes

On diluting this with water the alcohol turns milky owing to the kerosene coming out of solution. Kerosene has no effect on the film base or gelatin coating and serves to dissolve grease. Although pyridin and wood alcohol attack the film base when pure, in the above concentration and when diluted with water in the above formula, they have no harmful effect on the film base during the time required for cleaning. The above cleaning liquid prepared with "Pyro" motor alcohol had only a slight tendency to produce curl on film with nitrate or acetate base after complete immersion for 24 hours at 70 degrees F.

**Isopropyl alcohol**—This is now available commercially and the "practical" grade is satisfactory for the purpose. It does not turn milky on mixing with water and has little or no curling effect on film with either nitrate or acetate bases, even on immersion for several hours. It is non-poisonous,<sup>1</sup> is not decomposed on exposure to light and when used in the above mixtures does not attack the silver image or the gelatin coating.

**Tertiary butyl alcohol** is also available commercially and has properties similar to those of isopropyl alcohol. Its odor, however, is somewhat objectionable.

All the above alcohols tend to remove more or less of the tint from nitrate or safety tinted base film but the water present in the above cleaning liquid greatly retards this action.

### Amateur Movie Making

The movie miracles of Hollywood, which have been accomplished by means of devices of ingenious refinement costing thousands of dollars, are rapidly being made possible for amateur movie makers, with their ultra-simple and economical equipment, through recent developments and inventions, many of them the result of amateur experimentations, it is declared by "Movie Makers," Magazine of the Amateur Cinema League.

A simple clockwork mechanism which makes possible the "fade in," "fade out" and also "dissolve" effects, which do so much to give the movies a professional air, is now being made for the amateur narrow film cameras, thus solving one of the problems which has faced ambitious amateurs since the beginning of the amateur movie development in 1923.

**Panchromatic film**, the special stock which revolutionized movie making in Hollywood by making possible the photographing of colors in their natural tonal relationships, thereby greatly enhancing the beauty and fidelity to the subject of the screened picture, has been perfected for the amateur cameras.

Filters of all kinds with which fog pictures can be made on a clear day, night pictures taken at noon, and all varieties of softness and diffusion that can be introduced into filming have now been provided for amateurs.

A new audible footage meter which clicks off the feet of film exposed and thus enables accurate reckoning and economical use of film is another recent invention. New meters for different makes of cameras which measure the exact exposure to be made under every light condition have just been issued. Vignetting mattes to be placed over the lens and provide interesting frames on the filmed pictures, such as hearts, keyholes, cloverleaves and triangles are now available. A screen on which pictures can be projected in bright daylight without a masking box has been offered. A process for making film scratch proof has been provided. And, perhaps most significant of the growth in importance of the amateur movie movement, for the first time one of the great insurance companies has just offered a complete insurance coverage for amateur movie equipment.

These, the magazine concludes, are but a few of the most recent developments. It prophesies a constantly increasing list of important inventions.

### Approaches to Immortality

A. P. Hollis

The more science develops, the greater the probability of human immortality appears. True, the concept is somewhat different from that of the religions of the world—but the slow processes of science have a way of their own of confirming the deepest intuitions of the race.

The cave man achieved a fragment of immortality in the rude carvings he left posterity. The Egyptian mummies, pyramids and hieroglyphics greatly expanded the memorials the individuals of one generation bequeathed to the next. But monuments are cold. Daguerre in photographs gave us the actual features of our loved ones to cherish long after they were gone—but not the myriad changes of the human face and form in the characteristic action and expression that constituted the vital part of their individuality. Then the cinema gave us even this last—so that those dear to us live, move, and all but talk before our eyes.

Every home may now record these precious images of the family—long after they have passed away—and for some, who have made voice records—we may even hear them speak!





## Association News

JOHN R. SNOW, Mankato, Minnesota, *President*  
 CHAS. AYLETT, Toronto, Canada, *1st Vice-president*  
 D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*  
 GEORGE STAFFORD, Chicago, Illinois, *Treasurer*  
 C. W. HOWSON, Minneapolis, Minn., *Chairman Commercial Section*  
 PAUL TRUE, New York City, *Chairman Manufacturers Bureau*  
 L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*

Pop: "Whoop, I got a \$10 raise." Chorus: "Whoop, now we'll get . . ."



The above is as good a heading as caption. It answers the doubts of such as have subscribed to the National Campaign, and it invites those who have hung back to become wise and put money in their own purses.

Profits in business come of wise investments, not of savings. The piker is able to withstand failure a while longer, perhaps, but he cannot hope to achieve success.

The people of this country are prosperous. They are buying automobiles, homes (sometimes), clothing of the richest sort, radios and what not. These are being extensively advertised. The desire to possess them is created and nursed to an intense emotion.

This demand is created by liberal use of printers' ink and propaganda. The spending spirit is contagious. The dollar you grasp tightly with your hand in your pocket does not encourage your fellows to spend. Your competitor, with a generous gesture, produces generous impulses.

## CAMERA CRAFT

In the above picture father has come into more money and the family immediately envision certain luxuries as accruing to them. The magazines are full of page advertisements of automobiles and radios; the newspapers have flaunting pages of clothes advertising, the real estate man is at the door. What had photographers done to tell this family that pictures live forever? Until the National Campaign came into existence, what had been done to make the buying public photograph-conscious?

Help to make the family think that Pop's raise in salary means a portrait of the whole family. Help to make Pop want a picture of each of his loved ones.



Ye Editor Retaileth Neues of Ye Profession and in Quaint Italics Titillateth Ye Sphynx with Hys Quill

### New England Photographers

If the past is a criterion of the future, these sturdy New Englanders will make the 1928 convention a humdinger. The program certainly promises the best of everything and promises have always been kept in the past.

#### Monday Evening, September 10, 1928

Get acquainted costume party—followed by Grand March and general dancing. A prize will be given for the most artistic costume and one for the most grotesque. (A suggestion comes to us that a fine social contract might be enjoyed locally by holding meetings to plan costumes—perhaps expressive of some special interest indicative of your OWN community.)

#### Tuesday Afternoon, September 11

An automobile ride to "Pecketts"—one of the most delightful hostleries in New Hampshire. Arrangements have been made to have tea in the open where an unobstructed view of the mountains may be observed. Those who wish may enjoy dancing and bridge.

#### Tuesday Evening

Pop Concert. An exceptionally fine program has been arranged. Light refreshments will be dispensed at your table by attractively costumed girls.

#### Wednesday Afternoon, September 12

A Special Surprise in the way of a musical divertisement will be featured throughout the evening, coupled with many other

delightful events that will be mentioned in a later bulletin.

An afternoon of music by Mr. Chalmers Murray, violinist; Miss Mary Clarke, harpist, and Mrs. Williams, pianist, augmented by an author's reading from the "Songs of Childhood" by Mrs. Chalmers Murray.

#### Wednesday Evening

Banquet, speeches, general dancing and good time.

### Photographers of Northern California

The meeting was held in Martinez. That means much to those who attended any of the previous gatherings in that metropolis of Contra Costa. Daddy Lancaster and Martinez are so closely related that the good times had in that community revert, somehow, to him.

The special attraction was a lecture and demonstration by O. J. Smith of the Eastman Kodak Company. The subject: Photographing red-headed girls by the light of the new Panchromatic Carbons on Pancro plates and films. Mr. Smith is always a convincing talker, because he is an authority and to his wealth of knowledge and experience, he adds a natural graciousness of delivery that has always endeared him to his audiences.

The red-headed girl who posed was not named, but her patience and pulchritude deserves recognition and thanks.

President Lancaster officiated at the camera and what success he may have

achieved at the exposing end was kept from us by a not uncommon accident in the best regulated darkrooms. To be frank he put them in the developer, all those negatives, and forgot to take them out. Considering his duties as host and his tireless efforts to make us all happy, this is the less surprising. But if an hour in the reducer can bring the images out of the cooked emulsion, we shall see the masterpieces yet.

Norman Siller reeled off a few thousand feet of intimate motion pictures, some very intimate, as for instance those astounding happenings in a beauty shop. The pictures of the convention showed old friends, each seeing as his best friend himself (or herself) in action. In this connection George Derbfuss proved his ever existant interest in Publicity, however exemplified, or rather personified.

The Music, spelled with a capital as it deserves, was especially fine and whenever Mrs. Herzog sings we are glad to be present. Mrs. Johnson and Mrs. Miller acquitted themselves with their customary artistic rendition of good numbers aptly selected.

During the dinner several boy wonders furnished music of a light sort and added to the pleasure of the fare. And that dinner is worthy of the highest praise. The new Congregational Church of Martinez certainly sets a fine table.

At a late hour the pilgrims from San Francisco, Oakland, and way ports primed their motors and led by Miss I. M. Reed in a perfectly new Dodge, trekked homeward. All were glad they had come and most had profited by the evening. It was a fine meeting.

## **Commercial Photographers of Los Angeles**

Meeting opened at 8:25 P. M. at B. B. Nichols, Inc., after a pleasant dinner at the Masonic Club. The meeting was very good from an educational standpoint, as there were many very instructive ideas presented by those present. We feel that more of trading ideas will be very good for all, as anyone with an open mind is bound to learn a lot by listening to the inventions of others.

Mr. Williams' way of titling negatives was particularly good. Mr. Alter of the Eastman Co. gave a sales idea that was a

real one. Mr. Alter is to talk to us at the next meeting on Sales Opportunities. Come out and listen in, it is going to be good.

There were a number of others that were particularly good, but space prevents us from publishing them. This is to be a regular thing, so think something up for the next meeting.

Mr. Weaver is in favor of a general picnic for all Photographers, Commercial, Portrait, Finishers and Stockhouses. This is a good thing, we cannot get too well acquainted.

## **Humor as It is Hammered Out**

Jerry has a broad smile and a few black spaces show amongst the youthful ivories. He is a funny looking chap with normal boy attributes and not too much intelligence. But he is a humorist. Once a month in an esteemed House Organ, he takes a certain amount of raw material and on mental anvil hammers out laugh-getters. They are not always exquisitely refined, but Jerry is young and still in the ship-ping-room, according to his own confession. By-and-by, Jerry, if you work hard and don't get so funny as to offend the customers, you may be moved upstairs to somewhere near the Editor. Study him. His humor is spontaneous and incessant. It will cultivate and refine yours. But never, oh never, indulge in such a common designation as Black Bottom. That is an indulgence of roadhouses and country-clubs and should never appear in dignified magazines.

---

## **OBITUM: W. C. MARLEY**

Through the courtesy of William Thunen we receive the sad news of the passing of W. C. Marley, who died on July 23rd, in Newark, New Jersey, where he resided at the time. In wartime Mr. Marley aided the government greatly with his stereoscopic views of places and the topographical contours as stereoscopy only can show it. His contributions to this magazine will be remembered by old readers as constructive and pleasing, and the personality which endeared him to his friends carried across in his writing. Photography has lost an ardent advocate and the world a good man.

---





# PHOTOGRAPHIC DIGEST

Edited by H. D'ARCY POWER, M. D., F. R. P. S.

## Glycin and Stained Negatives

The use of Glycin is almost confined to slow tank development, and all those who have so employed it have, from time to time, had to suffer from loss by reason of the appearance of variously shaped stains, of an intractable character. The nature and cause of these stains has been recently investigated and reported on in one of those excellent bulletins that the Lumiere Brothers and A. Seyewitz so frequently issue for our enlightenment. From this it appears that the weak solution of glycin usually employed in tank development does in fact undergo surface oxydation with the formation of an adhesive and impenetrable film that coats the surface of parts of the negative as they are immersed and so interferes with their development. As this film is transparent and colorless the glycin developer has attained a reputation of permanency that it does not possess, and the authors conclude by condemning its use for slow development, which, they say, may be better carried out by metoquinone or metol-quinone. So far as the greater softness of glycin developed negatives are concerned this has been proved to be solely dependent on sufficient dilution. Some months ago E. A. Bierman pointed out the same fact in regard to developing papers, contending that the various grades of soft, normal and hard could be exchanged by adapting the strength of the developer and the final result would be the same.

## Lunar Photography

Most people think of the moon as being evenly illuminated, but Mr. Tompkins lately demonstrated at a meeting of the Royal Photographic Society that there may be as many as five zones of differential illumination. It is still a problem how to even them out. I commend it to my readers.

## Color Screen-Plate Technique

So much has been written on this subject and with such diversity or repetition that further notices seem scarcely called for, but Mr. E. A. Bierman, F. R. P. S., is amongst the oldest and most successful of our workers in this field and anything coming from his experience calls for consideration. His paper in the May issue of the Royal Photographic Journal should be read by all workers who have access to it. Two of his statements are of special value, namely regarding plate latitude he writes "Is color plate work to be tied down to flat lighting? My own opinion is that it will record much higher contrasts than it is usually credited with, but the developer must be graduated accordingly. In my own practice I follow this rule: Plates exposed in dull light 1 to 4. (Cinomet and water). In well diffused light, 1 to 6: in weak sunlight or average interiors, 1 to 8: in bright sun or strong contrast, 1 to 10."

Dealing with the question of development time he writes: "I eventually evolved a modified factorial formula by squaring the time of appearance, and multiplying by four. This works out well in practice providing that there is a patch of white or other very light color, or some sky in the subject. The appearance and developing times are as follows: 5 seconds TA equals 1m. 40 s. increased to 2 minutes; 6 seconds TA equal 2m 24s; 7 seconds TA equal 3m 16s; 8 seconds TA equal 4m 16s; 9 seconds TA equal 9m 24s; 10 seconds equal 6m 40s.

"Over ten seconds make up developer one to four, and develop for eight minutes. There is no difficulty about handling autochrome plates in a bright light—either green or red, or even orange—if the plate is not exposed directly to it for long periods. I have used a bright orange colored light, that was comfortable for bromide paper work, but I usually work with a

red composed of one piece of double flashed ruby glass and one piece of orange fabric with a 60 watt vacuum type electric light directly behind it—plenty of light to see the seconds hand of my watch.

"To make this possible I partially desensitize the plate by placing it in total darkness, in a bath containing potassium metabisulphite 5% and chrome alum 1%. The chrome alum has no effect as a desensitizer, but is a great preventive of frilling in warm weather.

"The dish is covered, the light switched on and the time noted. One minute is sufficient, but a little more does no harm. The dish should be rocked in both directions during the whole of the time, otherwise uneven patches are likely to occur. The effect of this solution appears to be to destroy the color sensitiveness, and convert the emulsion into that of a slow plate."

The writer then goes on to say that he washes the plates for half a minute drains for another half, and proceeds with the development according to the above factorial formula, in the bright light described.

#### **Bromide Papers and the Latent Image**

An interesting discussion was carried on in the B. J. P. The well known worker, Mr. Henry W. Bennett, discovered that prints on bromide paper, which had been inadvertently laid aside for sixteen days, gave an extremely poor image on development, although three of their number which had been exposed with them and developed at the same time gave perfectly good prints. Thereupon he proceeded to deliberately experiment and found that deterioration of the image showed itself on the fourth day and grew worse with increasing rapidity with each further day. Publication of these details led to a letter from R. P. Stewart, which seems to afford an explanation of the case. He relates that an experience in working with bromide emulsions some years ago demonstrated that if the emulsion be left unwashed—that is to say, retaining the by-products of the chemical changes that take place in making it—such paper, while perfectly good and even having excellent keeping qualities, will show this form of deterioration if the development of the paper be deferred after this exposure.

While there is no evidence as to whether the emulsion used in the case of Mr. Bennett's paper was washed or unwashed, yet this is the probable explanation of what has so far not been generally known.

#### **The Photography of Landscapes in Haze**

Professor Blackwelder of Stanford University recently dealt with this subject in the March issue of Science, pointing out that the photography of distant mountains under the condition of blue haze so often seen in the hot valleys of California and elsewhere, was rendered very unsatisfactory thereby, obscuration of the details being present, although the same were visible to the eye, and he proceeds to speak of the value of panchromatic plates and red screens for a correction of this condition. Furthermore, he recommends the use of plates treated with Krypto-Cyanine. Readers of Camera Craft will remember that some four years back I reported a lecture given in this town by Herr Leiber, who was photographic expert to the German government during the war, in which this very problem had to be solved in connection with the mists or hazes, presumably of smoke, that rendered the observations from aeroplanes inaccurate or impossible. While the name of the dye he used was not mentioned at the time, I saw the results of photographs taken in the air by these methods, in which the details of distant scenes quite invisible to the human eye were clearly recorded.

#### **Chromium Intensification**

It is occasionally found that the minimum quantity of hydrochloric acid which should be employed, together with the potassium bichromate solution, in order to produce the maximum degree of intensification sometimes fails to bleach the negative to more than a very slight extent. In such cases the probability is that more acid than stated will have to be added before bleaching is complete. In cases where this phenomenon occurs the cause should not be attributed to weak acid, if the latter has been obtained from a reputable source. It is due merely to the fact that the acid is rapidly exhausted by acting upon the familiar alkaline coating on photographic dishes which is a feature of so many water supplies.—British Journal.



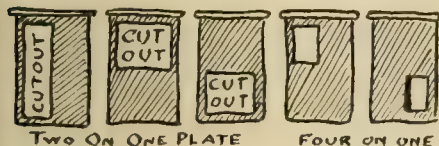
# THE AMATEUR AND HIS TROUBLES



Conducted by SIGISMUND BLUMANN

## Several Pictures On One Plate

Owners of cameras having a ground glass for focusing may get two or more exposures on one plate or cut film in a simple manner. All that is needed is several extra slides, preferably of pressed paper. If two exposures be desired running the long way of the negative, it will be necessary to cut out an opening as shown and at the moment when desiring to get the first picture, pull out the regular, undoctored slide and insert the cut-out so that the opening is to the left. Expose: Pull out the cut-out slide and reinsert the regular slide; remove plate-holder and focus so that the image centers on the right half of the ground glass, then proceed as before but have the opening to the right.



To get two images the short way of the plate requires two cut-out slides as shown herewith. What to do suggests itself.

To get four exposures on one plate cut out two slides as follows and proceed as before only reverse the slides to suit the portion of plate where the exposure is to register.

## Locating "Light Leaks" in Bellows By Fergie

Light leaks in camera and kodak bellows can easily be located by placing a small electric light inside the bellows. Draw the bellows out full length and inspect in a dark room. Any light leaks will show up plainly. Be sure and draw the bellows out full length, for some cameras do not leak light only when the bellows are out full length.

## Imitation Canvas Prints

This is an old trick but not commonly known. Put up a stretch of coarse canvas or Monk's cloth and with a side light to accentuate the texture make a short exposure and develop to a thin negative. By putting this between the negative and paper when printing you will get what appears to be a print on cloth.

## Odd And Grotesque Photos

Those of you who have worn photography to a frazzle and get nothing more than a mild kick out of the cut and dried methods of picture making, will doubtless be interested in this very unique brainstorm in which rash treatment is resorted to in an effort to get something a little different in the way of photos. If you are addicted to nightmares and are at least three fourths goofy you will get a big kick out of the idea. The nightmares supply the necessary ideas, and being goofy enables you to enjoy the resulting pictures.

To begin with, you will need a few miscellaneous negatives. Discarded portrait negatives will be O.K. to experiment with. Don't use good negatives, for once they have been treated according to this recipe they are beyond redemption.

For example we will use a 5 by 7 portrait film. Now soak said film in water until the emulsion is soft. Take out and hold over some source of heat until the emulsion softens and begins to "creep". Dip in cold water for an instant and hang up to dry. That's the whole idea—distorting the features. When dry, the negative is used for printing as per usual.

Do not heat too much or the emulsion will slide entirely off the base. Heat until the emulsion creeps and distorts the image to the desired degree—don't overdo it.

A similar idea is used in motion picture work. A wet plate is used and this is photographed while the emulsion is creep-



ing. The plate, of course, is a positive and is focussed at the aperture as when making titles, etc. The result when viewed on the screen is quite striking. The idea was used with good effect in one of Cecil De Mille's recent productions.

### "Extra Money"

If you are good at copying and can use pan material and filters, a great deal of extra money can be made in copying old photographs and tintypes as well as tapestries, etc. Many people would gladly have some cherished photograph reproduced and would pay a good price for it. The business is there—go after it. Make house to house calls if necessary and speak your little piece. Money talks, and the money earned thru copying will buy as many ham and eggs as the money earned in any other way.

### Holders For Drying Cut Films

By Fergie

A very simple and easily constructed device for holding cut films while drying is made from ordinary wooden clothespins and a length of stiff wire. The clothespins have a hole drilled through the ends and are strung on the wire. The wire is fastened up at any convenient place. The films are placed in the clothespins as per usual. Having the "pins" strung on the wire enables the films to be conveniently handled and spaced.

### Namias Developer for Fine Grain Images

In *Il Progresso Fotografico* for last September Namias gives a new formula which is claimed to deposit some of the silver in a state approaching the colloidal. The enlargement of cinema films has given an importance to the question of fine grain negatives to which we have already drawn attention. The new formula acts also as a desensitizer. It is of very low alkalinity. Elon 5 grams, sodium sulphite (cryst.) 100 grams, sodium carbonate 5 grams, water to the litre and add 5c. c. of one in a thousand safranin solution.

### Cheap Labels

Do not throw away your letterheads when you spoil a letter. Cut off the heading and glue on the back of your commercial photographs. This gives you a neat and cheap way of advertising your firm.

### Measuring Distance By Eye

Once before we advised the amateur snap-shooter to train his eye to distance measurements by practice. We have seen so many out of focus prints lately that it seems justifiable to repeat and amplify the advice.

Stand in a natural manner and look along the path of your garden, sidewalk or other even walk on which you have marked with chalk or otherwise, three, six, ten, twelve, and fifteen feet. Hold your camera in the position in which you hold it when taking pictures and assume a natural pose, which is not away from the subject, ridiculous, by any means for a change in position may mean an added or lost two or three inches in height and thus an entire change of angle; now look at the three foot mark and impress on your consciousness the feel of three feet, do likewise with the six foot mark and with the others. Do this frequently and in time you will be able to feel distances. Feeling three, six, twelve, and fifteen feet you can get the in-betweens easily.

We have met persons who could heft within an ounce or two the correct weight of anything, others who could feel time to fractions of a second with accuracy sufficient for ordinary needs. You can develop a distance consciousness.

### Is a Reflex Camera Best?

Another question that comes in various forms to our desk is the above. In an unfortunate moment I frankly told one correspondent that if I could retain only one of my several cameras it should be the Graflex or Reflex type as best covering every need. Of course this did not mean that such an instrument is best for every purpose. It is not nearly as efficient for viewing or portraiture as my view-box, nor as portable and convenient as my roll-film vest-pocket camera. But I couldn't shoot news stuff with any camera as well as with Graflex and I could make portraits in a pinch with it. The mirror-box device averages best over all requirements. It is not the best. Like with lenses the question remains, What do you want to do and how do you want to do it?

# NOTES & COMMENTS

## Note

The following letter has just been received by the secretary's office from the Pullman Company, at Cincinnati, Ohio:

Mr. L. C. Vinson, Secretary,  
Photographers' Assn. of America,  
Cleveland, Ohio.

Dear Sir:

We have in our possession a black sample case which was left in the Louisville-Cincinnati sleeper April 1st. The case has sample badges and plates in same with the name Caufield & Shook, Inc., Louisville, Ky., on them. We wrote to Caufield & Shook and they advised us to report the matter to you and you would see that it is advertised in the photographic journals.

Your prompt attention will be appreciated. Yours truly,

G. M. Zimmer

District Superintendent.

## Burleigh Brooks Again

There is no keeping that fellow Brooks out of print. About the time we are convinced we have covered his line he bobs up with something new or something different which we feel compelled to pass on to our readers. The Kawee Camera which is as efficient as any that weighs five times as much and bulks five times as large is now obtainable with ultra speed lenses and still so thin that you can put camera and all in your hip pocket without being suspected of carrying about another sort of commodity. The Folmer Graflex Corporation announces the series D, revolving back Graflex equipped with Schneider f 4.5 and f 3.5 lenses as ordered. The Triax Tripods shut up like a jack-knife and open automatically on the pressure of a trigger and though light and compact as one leg of a wooden tripod, will bear a burden of 100 pounds. He was over in Europe, this Burleigh Brooks, and goodness only knows what he has up his sleeve now. It will prove profitable for

our readers to get in touch with that establishment. Write to Burleigh Brooks, 136 Liberty Street, New York, and ask for literature.

## A Noteworthy Bargain List

Once a year Hirsch & Kaye issue a bargain list that is worth studying. Not only are the prices startlingly low, but the reputation of the firm is back of every article listed. When this concern states a thing is good as new it may be accepted as being virtually new. With such a guarantee of satisfaction it would seem that no risk is taken in buying over the counter or by mail. This catalogue may be had for the asking. Address Hirsch & Kaye, 239 Grant Avenue, San Francisco, California.

## The Orix Press Camera

The Carl Zeiss concern are exploiting another remarkable camera in their list of many fine instruments. The Orix was formerly known as the Trix, and none of the qualities that distinguished it under the old name have been lost in the change of title. It is especially designed for press photography and is, therefore, compact, strong, quick in action, precise, and equipped with a long bellows draw. The literature pertaining to this outfit and other merchandise of kindred sort may be had of Carl Zeiss, Inc., 485 Fifth Avenue, New York.

## F. A. Loomis Visits Us

When Mr. and Mrs. F. A. Loomis decide upon a vacation they decide all over and completely. On leaving their Emporia, Kansas, home and business they posted a sign on the door reading, "Closed for two months. Gone fishing." A few hours before this writing Mr. Loomis called here and we were unable to judge as to whether he had done his fishing, or was on the way to that piscatorial sport. He looked well and claimed a vacation paid interest on its cost as well as business. It was good to see him again. Our only regret is that he left Mrs. Loomis at the hotel and came to see us without her.

## CAMERA CRAFT

### Joseph Bing in Vienna

The aggressive American representative of Drem Products has been in the city of Vienna, Austria, for some weeks in consultation with Dr. E. Mayer, who originated the entire Drem line. On the return of Mr. Bing we may expect the old, established units better than ever and particularly adapted to the climate and idiosyncracies of these United States and probably new things. Drem products are not equally popular since they appeal in some instances to ultra-sophisticated tastes and limited uses, but they are uniformly excellent. Bromoil, the process around which most of these products are built, is growing popular so rapidly that it is not at all stretching the imagination to foresee professionals vying with the advanced amateurs in making ink pictures instead of the casual bromides. In the meanwhile the Justophot, the Cinophot, and the Dremophot are selling to still and motion picture makers in astounding numbers. The Drem Products Corporation may be addressed at 152 West 42nd Street, New York.

### A Panchromatic Roll Film

The Imperial Impan Roll Films are here. A daylight loading spool of the sort you are used to buying, but with a highly color sensitized film to be exposed with the proper filter. The speed of the emulsion is such that with the use of the Impan Filter the time is not extended to a prohibitive degree and snapshots are by no means impossible under propitious light conditions. Our own experiment with the product enables us to speak well of it. G. Gennert, 26 East 13th Street, New York, is the American agent for Imperial films and plates.

### Twenty-five Years Ago

We are indebted to Ralph Young for the following clipping from a morning paper of August 7th. The affair mentioned is of equal date in the year 1903.

"The California Association of Photographers announced arrangements for a convention and photographic exhibit, to be held in Mechanics' Pavilion, this city, in September. The committee to manage the affair included F. A. Webster, M. M. Morrison, Dave Millender, H. G. Vaughan, O. H. Boye, H. W. Oliver, Louis Thors, William Lussier, I. W. Taber, E. L. Bowman."

### The Universal Silar Camera

Hugo Meyer & Company announce in the Silar a universal camera, or, as they qualify it, a single camera for every purpose. It is all of metal, has a spring actuated ground glass and revolving back, is leather covered, has every known adjustment, and is equipped with the Meyer-Plasmat set of lenses which offer three focal lengths: the complete combination being f 4.5, the back element f 11, and the front element f 8. It is only necessary to say that Dr. Paul Rudolph designed it to convey a sense of value. Another lens offered with the Silar outfit is the Meyer Extreme Wide Angle working at the surprising aperture of f 9 and which covers an angle of approximately 100 degrees. The Hugo Meyer Company are prepared to mail a booklet on this equipment to anyone writing to their New York office at 105 West 40th Street.

### A New Exposure Meter

The Camera Craft Universal Exposure Meter brings to the Cine Camerist a slide rule device that quickly gives the correct exposure under any and all conditions, on any point of latitude and longitude, and altitude as well. It is a complete motion picture meter, but also is as complete and effective for still photography. In a word it covers exposure for whatever purpose and is therefore called Universal. In a durable cloth covered envelope with a booklet replete in directions and tables with clear and concise instructions in exposing. From your dealer or Camera Craft Publishing Company for \$2.00.

### Voigtlander

The Voigtlander lenses have been known for generations as standard, as of a quality that places them among the best. In recent years cameras for the use of plates and roll films have been added, as well as Stereo cameras and optical accessories. These maintain the reputation of the makers. It is gratifying to note that in this country the integrity of Willoughby has been put behind this high-grade merchandise and the facilities of this firm now offer a distribution to the trade and the consumer that makes for increased popularity.



## Tennessee Eastman Corporation

A most interesting pamphlet came to our desk recently, from which we learn that the Eastman Corporation is going intensively into lumbering interests, more, we gather, for the by-products which apply to their chemical needs than for the actual production of lumber itself. The booklet gives clear explanations as to the production of acetic acid, creosotes, and alcohols, and the illustrations are educational. We are once more impressed with a conviction that large concerns gain in power with increase of magnitude and, that power being rightly applied, achieve more and deliver more of good to mankind than is possible for small producers. When we consider that every Eastman plant has mothered a research laboratory and that each research department has left a wake of new discovery on the sea of time, some idea may be gained of what immense corporations can do for the advancement of civilization. The Trust, ever held up to us as a horrid monster, loses much of its horridity and, in fact, becomes a beneficent creature.

## Two British Magazines Unite

By the time this reaches the reader's attention, Illiffe & Sons, Limited, of London, will have amalgamated the New Photographer with the Amateur Photographer and Cinematographer. The publication will hereafter be known as the Amateur Photographer and Cinematographer Incorporating the New Photographer. The price will be 3d weekly. The publishers, in the utmost fairness, propose to add the subscription periods of such of its readers as may appear in both lists and extend their subscription for that total length of time.

## "Holland in Pictures"

During the Olympic Games an exhibition is being held from the 20th of July till the 15th of August in the Municipal Museum at Amsterdam.

The purpose of this exhibition is to give the strangers who are at Amsterdam at this moment, an idea of the characteristic beauty of Holland, of the waters, the mills, the polders, the costumes.

This exhibition accomplishes a vacation, for alas, most strangers, who visit Holland, only get a very one-sided and imperfect picture of the beauties; Amsterdam, Marken, Volendam, that is all.

"Holland in Pictures" now, will show that there are still more fine things to admire in Holland, and so in a certain sense it may be a guide for all, who will learn to know the beautiful Holland.

Also from an photographic view-point, the best of all has been collected, so that people can enjoy, not only the beautiful lanes of Holland, but also artistic photographic work.

In order to acquaint the strangers with Dutch products, every hundredth visitor receives a little basket with the world-famed "Westland fruit."

## W. W. Swadley Repeats

We take great pleasure in congratulating Mr. and Mrs. Swadley on the achievement of another addition to the family. Roosevelt has gone to the bosom of his fathers, but the good word goes on. Judging by the previous sample the Swadleys are a decided asset to the nation, and we welcome this new prospective citizen and photographer. God's blessing on the family.

## A Noteworthy Competition

Information far in advance of the fact enables us to tell our Bay Cities photographers that some time in the next few months a hotel in course of construction will offer substantial, yes valuable, awards for pictorial, architectural and general views of their building. There are to be two classes, amateur and pictorial, and in each class a freedom of viewpoint and rendering is granted that should lead to original conceptions. Keep on the watch for the announcement.

It will interest our readers to know that the competition is in charge of William Horace Smith.

## We Are Not At Home

If your letters do not receive their usually prompt replies, please know we are in Portland at the P. I. P. A. convention. Promptly on our return any letter addressed to Miss Reed or the Editor shall be answered. What happened at the convention you shall read as detailed from personal observation and experience. If you are a member of the association and are not attending we shall miss seeing you. You shall miss or are missing a good time.



# OUR BOOK SHELVES

## The Sentinel Guide to Photography

George J. Hughes, F. R. P. S. does not rush into print in his idle moments nor for the pride of authorship. When the Hughes do things there is a canny reason, to be redundant, and the thing is apt to be well done. There are plenty of books on photography, more than sufficient Guides that fail to guide, but here is a simple pamphlet of less than a hundred pages that is as full of valuable information as an egg is of meat,—fuller since it crowds out the usual flyleaf and finds itself with the last page against the back cover. Paper covers, Camera Craft Book Service, Fifty cents.

## Das Deutsche Lichtbild

Mistakes will happen even to our esteemed contemporary and, alas they do happen to us so often. Perhaps this human trait endears us to humanity. Mr. F. R. Fraprie notifies us that we failed to credit his company, The American Photographic Publishing Company, with being the American agents for Das Deutsche Lichtbild. Welches, Lieber Freund, ist auch ein urthum. The oversight is hereby corrected and our readers are informed that the really beautiful volume may be obtained from American Photography through Camera Craft Book Service.

## Kine Color Photography

Once more many readers and serious students will wish they could read German and we certainly wish we had not neglected what German we learned in our school days. Professors Otto Mente and Dr. Erich Lehmann, and Oberingenieur Willy Nauck have given us a work with a formidable title but rich content. In the original it is called "Das Negativverfahren die Verfahren der Farbenphotographie, die Verarbeitung kinematographische Filme, photographische Machinendruck in seinen verschiedenen Abarten." Bound in flexible covers, and beautifully printed in Roman text.

## Towle's Lightings

The other day a portrait photographer from inland visited us and in the course of conversation he remarked that he owed his success in a small town to the ability to deliver metropolitan portraits and that this ability had been gained through study of Towle's Lightings. Had this been the first time we heard the statement in various ways it should have passed as one man's idiosyncrasy but it seems common and is voiced often. In recommending every professional and most serious and ambitious amateurs to get the book and to study it and practice its teachings we are, therefore, not only giving advice from convictions of our own but based on the experience of many others. Get your copy today and hasten your attainment of excellence. Bound in cloth, profusely illustrated with portrait reproductions and lighting diagrams and minutely explained with clear text. Five dollars through Camera Craft Book Service.

## Three Color Separation Photography

The author, G. B. Wright, says in a foreword that "This work is intended as a guide for the beginner in color photography. Primarily I was prompted to attempt it because of the difficulty I had in finding practical information." And he has done well in supplying practical information in a most available form. The booklet is charmingly gotten out, well printed and illustrated in black and white and colors, bound in paper covered cardboard, 45 pages. But the price may seem high at \$3. The author, who is his own publisher, very rightly contends, however, that when the labor of producing the material, the specialized sale, and the urgency of the demand from those who need and will have such a work is considered the price is based on the quality and value of the text and not on material factors. Obtainable from G. B. Wright, South Norwalk, Connecticut, your dealer, or Camera Craft.

SAN FRANCISCO  
PUBLIC LIBRARY

# CAMERA CRAFT



CHIEF RED CLOUD

JOHN HOWARD PAINE

SAN FRANCISCO

CALIFORNIA



ASK  
YOUR  
DEALER

THE  
BEST  
TEST  
IS  
A  
TRIAL

For Perfect Pictures

(Call it  Gay-vert)

## ROLL FILM

"Rich in Silver"—"Fits All Cameras"

Ultra-Fast — Orthochromatic — Non-Curling — Non-Halation

Descriptive Catalog on Request—Address Dept. No. 4

**THE GEVAERT COMPANY OF AMERICA, Inc.**

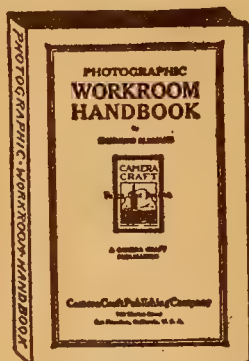
423-439 WEST 55th ST., NEW YORK CITY

CHICAGO, ILL.  
413-421 N. State St.

PORTLAND, ORE.  
345 Salmon St.

TORONTO, CAN.  
347 Adelaide St., West

Manufacturers of Photographic Products for more than a Third of a Century



*The Second Edition*

## Photographic Workroom Handbook

By SIGISMUND BLUMANN

*Editor of Camera Craft*

**IS READY NOW**

The first edition in paper covers is exhausted and in accordance with its fixed policy, Camera Craft shares its profits with its friends by putting the surplus into production without increase of price.

This edition is fully corrected, enlarged by several formulae and

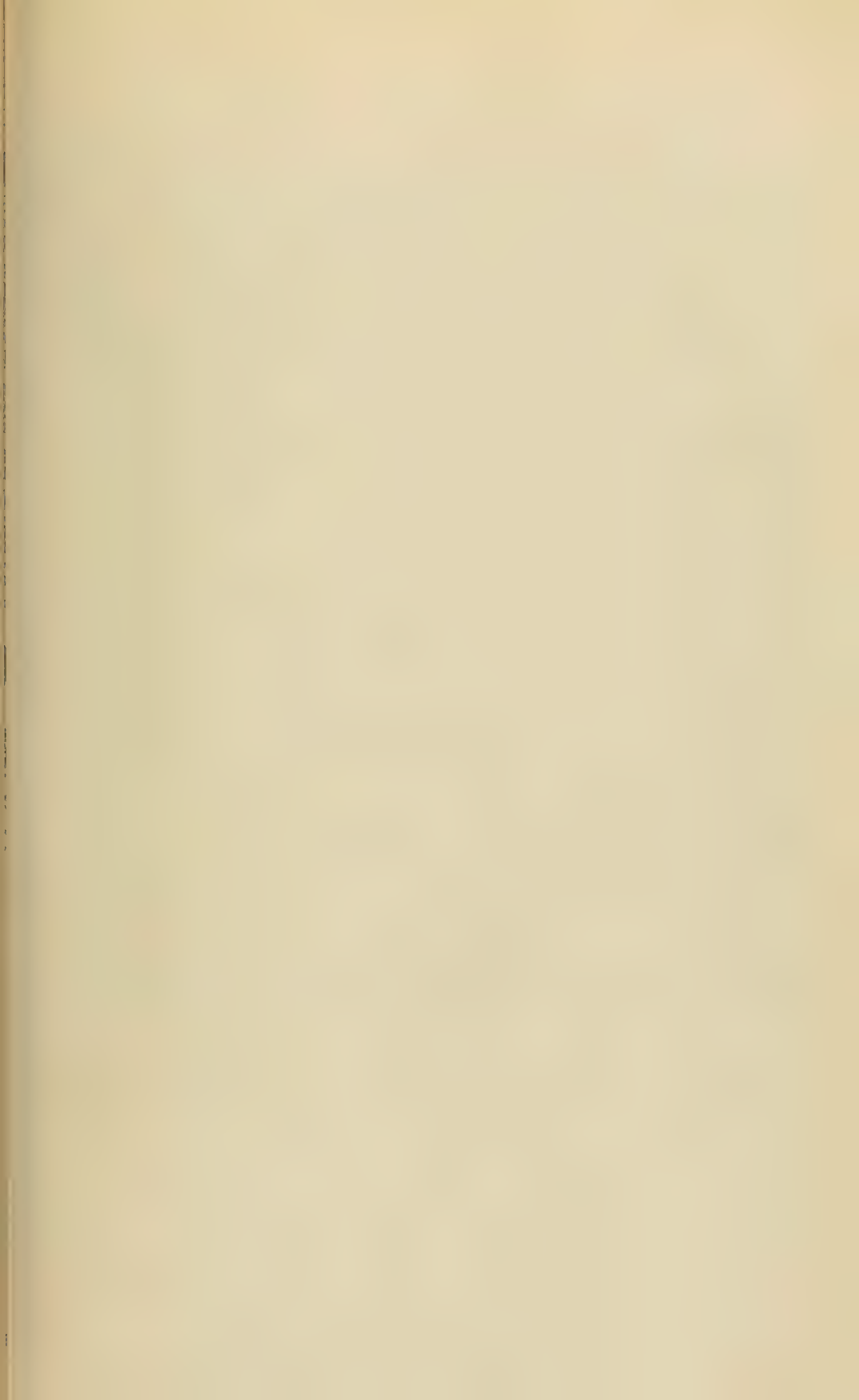
**BOUND IN CLOTH AT THE SAME PRICE  
ONE DOLLAR**

*At your dealer or from*

**CAMERA CRAFT PUBLISHING COMPANY**

CLAUS SPRECKELS BUILDING

SAN FRANCISCO, CALIFORNIA





PORTRAIT  
*B. A. Reade*



# CAMERA CRAFT

*A Photographic Monthly*  
SIGISMUND BLUMANN, EDITOR

*Claus Spreckels Building, San Francisco, California*

FOUNDED MAY 1900

VOL. XXXV

OCTOBER, 1928

NO. 10

## Carbon Printing by Projection

### PART I

By Thomas Southworth

(Illustrated by the Author.)

It appears to be necessary, when speaking of Carbon Printing by Projection, to be very plain about what is meant, otherwise the Photographer familiar with the Photographic Process De Luxe may anticipate that which is to follow must, perforce, mean nothing more than a rehash of the old, well-known methods of making large Carbons.

It is not generally known, even among Carbon Printers, that large Carbon prints may be made from small negatives by the DIRECT method of Projection, as employed in ordinary projection work, when using the modern rapid developing papers. The thought of first importance that comes to the particular photographer contemplating this change of procedure, is, "Can I maintain contact quality?" My answer is, "This can be done." To support this statement, let me quote one of America's outstanding Portrait Photographers, when returning about two dozen large prints made from 5x7 negatives, borrowed for the purpose of showing them at a meeting of Cameracraftsmen. "All were much interested in looking over these prints. THERE IS NO EVIDENCE OF THEIR BEING ENLARGED, EXCEPT IN ONE OR TWO INSTANCES."

I find myself drifting towards a discussion of Projection Printing with regular mediums, which is not my present purpose, but before snapping back to my text, I would like to interpose the remark that few photographers, THOROUGHLY EQUIPPED, would step back to printing by contact, EVEN FOR PRINTS THE SIZE OF NEGATIVE, once they undertook and made a serious effort to make ALL their prints by Projection.

I first took up Carbon Printing, something like 25 years ago. Since—in comparison with other mediums—it was a lot of bother to make even a single print, I decided that that print must have some size, hence, I made the usual transparency and from that made my large negative and printed by contact. One soon loses interest in this extensive procedure, and thus my Carbon activities went by default.

During the intervening years, a process known as the Carbro Process was brought to light, and is now very popular, in England. This process, in brief, is a matter of making a Carbon print by a chemical instead of actinic action, the sensitized tissue receiving its image by contact with a chemically treated Bromide enlargement. A friend of mine—one of these super-amateurs—insisted that I take his stock of materials and see what I could do with THE CARBRO. To be brief, I didn't get anywhere with it, and I don't want anybody to say I didn't try hard. Such was the situation when I recalled the rule of Carbon Printing, "Print the time it would take to make a LIGHT proof," then I wondered if it might not be possible, if the negative was thin enough, to make a light proof to a PROJECTED SIZE within a reasonable length of time, with the aid of my Aristo lamp and naked condensers and rapid portrait lens. Using my lamp with resistance OUT I secured such a proof in 12 minutes.

From this time forth, I have made a great number of 11x14 Carbons from my invariable 5x7 negative, with almost unvarying success.

My next efforts were in the direction of shortening the exposures, not so much as a time-saving feature, but to punish my condensers and film less from the excessive heat from the arc lamp. My efforts in this direction have been well rewarded and I shall undertake to incorporate in that which is to follow, such features that have been tried and found practicable.

As most Carbon printers are aware, the strength of the sensitizing bath for Carbon tissue has much to do with the printing time. The stronger the bath at the higher temperature—not to exceed about 65 degrees Fahrenheit—yielding prints with the shortest possible printing time. But with this higher temperature and strength of bath let me stress one must be careful not to carry the point to such a degree as to impair quality by FLATNESS. The rule is: The weaker the sensitizing bath at the lower temperature, the more brilliant the print, and vice versa.

Obviously, it is necessary to determine what strength of bath one should adopt, to secure the best possible prints from the particular type of negative one may make. Before doing this, one should first determine a negative quality of such thinness that will yield satisfactory prints on ORDINARY mediums—as thin as they may be made without sacrifice of brilliancy—then determine the strength of Carbon Sensitizing Bath best suited for these negatives when printed by Projection in the manner to be described, thus leaving the negative suitable for printing in any medium.

This settled, one's mind naturally turns to the various chemical additions to this pre-determined strength of sensitizing bath for the purpose of further increasing speed and to such extent further reducing the printing time and thus reducing the danger of cockling the film during the printing operation. There are quite a number of such accelerating agents. Those only in which I have been interested are Nitrate of Uranium and Copper Chloride. Of the latter, Professor Eder says: "Tissue is increased in sensitiveness about three times." Then again, the manufacturers of the tissue most commonly used (Autotype) are manufacturing a tissue in certain colors, which has received

some special treatment of their own, which, when sensitized in the usual way, has DOUBLE ordinary speed. This special tissue, I believe, has not as yet been brought into this country.

Frankly, I am not very much impressed with these accelerators. During my limited use of them it has seemed to me that this additional speed has to be paid for with loss of brilliancy. I have made mention of these latter things that anyone interested in them may make his own investigations in the employment of them; as for myself, I shall continue to use the first of the two sensitizing formulas to follow, as I feel that in its use I have reduced my printing time without running the hazard of too much softness in print quality, as far as I need to go.

For the benefit of the Professional Portrait Photographer I have the following suggestions to make. These suggestions are in the nature of rules I formulated for myself. In order that I may hold any enthusiasm in the making of Projected Carbons, I must find the simplest formulas and the most dependable methods from the alpha to the omega of the process. I must not discourage my use by drifting into a multiplicity of formulas, and colors, and supports, as to do so would ultimately mean my having to abandon the process, hence I have strictly adhered to my self-made rules of: One strength Sensitizing Bath (5% Photo Ammonium Bichromate at 65 degrees and two minutes immersion); Selection of not more than three colors (Italian Green, Deep Blue, and Vandyke Brown); one size (11x14); one support. (Ground Opal.) The making of each print calls for a chart, for future reference or duplication. These are filed. The printings being all the same degree of projection, all other conditions being likewise constant, only variation of negative density has to be reckoned with. The matter of determining the necessary exposure from any negative is easily and quickly determined—by making tests on ordinary developing papers, one from the new negative and the other from one from which a successful print has been made, and making suitable modifications. Where one is in the habit of getting fairly uniform negative quality, even these quickly-made tests can be omitted. On a recent occasion, I made eight Carbons from as many negatives without preliminary tests, without the loss of a single one of them. Here's the reading of a chart or two, taken at random: "March 11, 1928. Myron Halle. Boy. 5% at 65 degrees. Vandyke Brown. 2 mins. printing. Negative. Thin. Results. Perfect." Another: "March 11, 1928. Rush. Mother and child. Horizontal. 5% at 63 degrees. Deep Blue. 2½ plus 2½ printing. Negative. Medium. Result. Perfect." (Plus, in printing time implies time for extra printing of local parts.) Another reads: "5 plus 5" from a negative about as dense as I ever allow them to go, for ANY purpose.

It is quite possible to make Projected Carbons from 5x7 to 11x14 in less than one minute, from negatives which are NOT TOO THIN for regular contact developing papers, but this involves the use of "Double Speed" Tissue or Copper Chloride or Sulphate Accelerator, but the resulting print in the use of the latter, is liable to be somewhat lacking in boldness or brilliancy.



I would like it to be understood that my scheme of things is predicated on a start to finish procedure. My affairs will not permit any other method. This entirely eliminates tissues of varying sensitivity from variations of age.

Let us then go through the complete process in approximate chronological order. Making but one size print, I saw the 30" wide roll of tissue through the middle, giving me two rolls 15" wide and 12' long. These are cut in 12" lengths, as needed, and initialed on the back, as to color. My heavy ferrotype plates are next cleaned and liberally waxed with Paraffin dissolved in Benzole. Next my invariable 5% plain Bichromate of Ammonia bath, of good depth, is brought to the uniform 65 degrees. Each sheet of tissue is sparingly trimmed so as to remove rough edges, then immersed for TWO MINUTES in sensitizing bath. One should use rubber gloves; the tissue should also be dusted back and front. Gently run the fingers back and forth over tissue to remove airbells. At the end of 1½ minutes, when the tissue curl has almost yielded, slide the ferrotype plate under tissue, and at the end of two minutes, bring the tissue side in contact with ferrotype plate, UNDER the solution, hold the two by one corner, for a few seconds' draining, then with 4" drag squeegee, on a level surface—preferably in the sink—squeegee into contact, from the center outwards towards all edges. Stand each one in the breeze of a strong electric fan with a little heat drawn in (I've found no ill effects from CONSIDERABLE HEAT with my powerful fan); at the end of from 30 to 60 minutes the tissue is willing enough to strip. One must NOT force stripping. The tissue MUST be dry before running a pocketknife around the edges. The latter is seldom necessary. Perhaps I am over-cautious, but the sensitizing and drying is done in the yellow light ordinarily employed for slow contact developing paper. I use PLENTY of this yellow, or more correctly, orange light, from two sources, the second light suspended over the trimmer. The tissue, of one or all three colors, stripped from ferrotype plates (usually eight pieces), is trimmed to full 11x14 so as to completely fill the regular 11x14 printing frame without buckling. The rabbet of the printing frame is ordinarily ample for the very necessary safe edge. Before loading the printing frame with the tissue, the usual focussing must be done. But let us, here, go into detail, regarding the light, condensers and lens. The light (Aristo lamp, with FULL current), MUST BE accurately centralized in each direction, for be it remembered you are going to use RAW light. Proceed as follows: Insert film in holding grooves on camera side of condensers, focus on white sheet of paper in 11x14 printing frame, supported on adjustable block on easel. Withdraw negative, and note lighting effect. First determine the distance backward or forward the light must be moved, to secure a uniform disc of light. An aid to this is to remember that a "dark moon" within this disc indicates the light is too close to condensers; a rainbow ring on outside edge of disc indicates the opposite. This settled, see that the light is neither too high nor too low, or too much at either side. With my 9" condensers, about 8" is the distance my light must be behind the condensers. From time to time, the lower Carbon must be raised, as will readily be seen. The heat imparted to the negative appears to be a focussed heat, hence there is little one may do to keep this down to the mini-

## CAMERA CRAFT

mum, except by short exposure. I feel that it's not a bad idea to have a current of cooler air passing between the light and condensers, and here, again, I use my electric fan. One must provide against this air current affecting the carbons. Then the lens. I confess a profound weakness for the effect one may secure with THE FRONT ELEMENT ONLY of either my 3B Dallmeyer or 2A. There is a softness of focus thus securable, that, without loss of brilliancy, is NOT securable in any other way. That sounds dogmatic. Disbelieving it, try it for yourself. Unfortunately, this method is not so practical for groups or full figures. In such cases the complete lens will have to be used. As to stopping down. I don't, if I can avoid it, and then only MOST SPARINGLY; otherwise that delightful softness is killed. There is no great difference between the focus of the complete and single element lens mentioned, except that retouching is less conspicuous with the single element; but the exposure is double that of the complete lens. I NEVER stop to more than 5.6, and SELDOM that much. The one who has not tried the single front element of the Petzval (Portrait) type lens for projection work, has a very happy surprise in store.

Unfortunately, owing to the intense heat, I feel that in most instances I must, and therefore do, use my complete 3B Dallmeyer, to keep down the exposure time.

When using the anastigmatic type of lens in conjunction with the Aristo or other similar illuminant, one must remember to compensate for the difference between the visual and chemical focus. The latter is somewhere around  $\frac{3}{8}$ " farther from the lens. No matter what type of lens you may employ, time spent in checking for differences of this kind will be well invested.

The image being focussed, insert the tissue, which, owing to its having been dried in contact with the ferrotype plate, is quite smooth, although inclined to roll. One may use a sheet of flawless, clean glass for support inside the frame, in which case, obviously, the focussing must be done in the same manner.

After the necessary exposure of from 2 to 4 or 5 minutes, the tissue is further trimmed on ALL edges so as to bring the dimensions down to about  $\frac{3}{16}$ " short of the standard size. This, to allow for expansion on being wet, without extending beyond the edges of the Matt Opal. The transferring water should be around 60 degrees, the print being kept submerged, COMPLETELY, until ALMOST flattened out, then turned over, and brought in contact with the opal support which has been lying in the tray during this operation. Bringing the tissue and support from under the water together, the same squeegeeing operation as when sensitizing is repeated, and placed between blotters, after removing all evidence of moisture from back and edges, and placed under pressure for 15 minutes. During the latter period, another Carbon may be printed, or possibly two, before the expiration of the pressure period of the first print; in fact, after one becomes more certain of himself, the whole six or eight 11x14 prints may be put through before proceeding to the most fascinating stage of Developing.

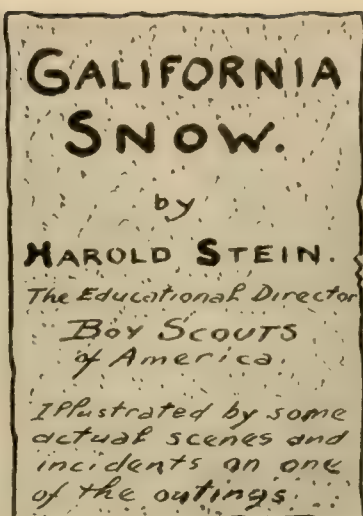
I have several reasons for adopting Matt Opal for my one and only support. It may be readily cleaned, requires no special preparation or soaking, easy to handle, rigid for squeegeeing operations, heavy, so that it is always on the bottom of the tray, easier to develop on, especially locally, can be stood up to dry; a print may be cleaned from it with lye, and used again, no need to use the usual alum hardening bath after development, an advantage also in the latter omission, in that one can clean up and brighten parts with soft rubber when dry, and after the usual spotting and air brush work, dipped in Banana Oil (one, two or three dippings, according to lustre wanted), then ready for framing without glass or backing, absolutely waterproof, and susceptible only to accident from breakage. There is a selling feature in showing to the prospect, that the picture is on "Porcelain" by holding it between the light and prospect. (The question of possible breakage has been raised several times, hence I have an order placed for "Aluminum" supports which I notice is now offered by The Autotype Co. of London, but this, of course, will eliminate the temporary feature of the Matt Opal.

I have not offered the foregoing as a treatise on Carbon Printing. It is designed more especially for the man familiar with this most beautiful and permanent process. I have attempted to show that the process of making Large Carbons DIRECTLY FROM SMALL NEGATIVES with the PROPER equipment is thoroughly practical. It is just as practical for the one-man business, like my own, as the larger studios. One may, at say 5 p.m., sensitize eight 12x15 sheets of tissue ferrotype, and have them under the fan, with a little heat, within an hour. Returning at 7, one may make the eight prints, easily, in two hours, all preparations having been already made, and find eight beautiful Carbon Porcelains (stressing the fact that they are GENUINE Carbons), ready for spotting or working up next morning. With any of two dozen or more colors selected (preferably colors the least like ordinary photographic colors), if one cannot, with all these distinctive advantages of color, quality, permanency, and support, requiring no supersalesman to bring to the notice of the average discriminating prospective customer, sell them, then, surely, he is a salesman inferior to myself, and I'm not much.

The interested reader, unfamiliar with the Carbon Process, can easily procure a treatise on Carbon Printing, covering features I have intentionally omitted, and I will assure him that, if he has or will secure the necessary equipment, and will painstakingly follow the simple but nevertheless important directions, he will find the process not only simple, but highly profitable and most fascinating. Cleanliness is a very important factor, as also is that of temperature. Hold yourself down to the simple forms I have laid down for myself. Uniform strength and kind of sensitizing bath, colors, negative strength (charting each print as and when made), lens and support, time of immersion in sensitizing bath (although this is not so important as temperature), THEN you will be less likely to look for an excuse for abandoning the process on account of "complexities."

(To be Continued)





Rain fell from dark clouds on February 3rd in San Francisco when a group of twenty-five lads, headed by their chief, Scout Executive Raymond O. Hanson, assembled at the far-famed Ferry building. Their spirits were high as they crossed the Bay, and many commuters eyed them curiously, unable to account for the Arctic equipment which many of the boys wore and carried with them. It was the Second Annual Winter Camp of the San Francisco District Council, Boy Scouts of America, which was getting under way.

Gentle Reader, have you ever tried to sleep in a Pullman with a group of lively youngsters distributed around you, two to a bunk? If you have, then you know whereof I speak, if you haven't, an experience awaits you. At every stop vociferous arguments arose as to the exact location of the train: "This is Sacramento" from one end of the car. "You're crazy, it's Stockton—" and so on, far into the night.

Early morning and pouring rain. It rattled against the roof of the sleeper, it pattered in long streaks against the windows of the car, and anxious glances into the gray dark revealed occasional patches of snow and very considerable amounts of mud and water. None of the boys voiced their thoughts. Prospects were anything but bright. The train started climbing. Additional engines lent their herculean strength, snow-sheds increased in numbers, and spirits rose: it now appeared that there was some snow in evidence. The last fifteen minutes the lads stood in the corridors, and during that time considerable climbing was done, so that when the train puffed into Cisco Station at an altitude well over five thousand feet, the climate had undergone a complete change.

With a hissing of escaping steam the train came to a full stop, the doors of the Pullman were opened and the lads poured out into gently falling snow, to sink into at least three feet of the same substance between the tracks.



The first task of the leaders consisted in feeding their young charges, a ceremony which was attended to as soon as comfortable cabins had been assigned to the Scouts' use. Oatmeal, eggs, hotcakes, chocolate and toast . . . . was it welcome? Was it enjoyed? An unnecessary question. The lads pitched into their meal as though they had been deprived of food for a month, instead of a night.

A glorious day of snow sports followed. The day preceding the arrival of the campers three feet of snow had fallen. Shortly after their arrival the sun broke through, emphasizing each depression in the snow with deep blue shadows, sending avalanches of snow down the pointed roofs and forcing the Scouts to peel off sweaters and mufflers.

I state the facts when I say, that but very few of these boys had ever seen snow outside of the motion pictures where snow frequently is salt or plaster of paris. Their delight at finding a new play element was immeasurable. The toboggan slide was used to its fullest capacity, every boy tried his skill on skis—they look easy, but are tricky, particularly when they cross behind the skier. The day passed too quickly, to make way for a light night. In certain parts of Europe summer nights are so bright that handwriting can be read; this snow-night equalled its European counterpart. A bright moon bathed the landscape in iridescent, scintillating white, the snow reflected the rays and at midnight minute objects were easily distinguished.

After an informal camp fire in the officers' quarters, the boys walked to their cabins, quietly impressed with the beauty surrounding them. You may say that most boys lack appreciation of the aesthetic. That is



not so; he does not lack it. He possesses it in its finest qualities, but does not give utterance to his sentiments. They stay within him, becoming an integral part of his whole makeup.

Sunday was a repetition of the first day. Under leadership of Dean Vaughan MacCaughey and Scoutmaster Harold E. Hanson the boys started out for the Yuba River. Three "huskies" were assigned to break the trail for the others. Sinking in snow to their hips with each step they slowly forged their way forward. It was hard work, well accomplished, at an unusual altitude.

Evening again, and the fellows looked back to a day full of experiences: a gigantic snow man had seen the light of day; a skiing expedition had surveyed the countryside for considerable distance around, a valiant snow ball battle had taken place and both toboggans had met with disaster as witnessed by broken runners and ropes.

Sitting before his crowd the chief spoke: "When we return to our homes in the city we may not be able to appreciate just what an outing of this kind really means to us; as the weeks and months and years pass, however, our thoughts will constantly wander back to this beauty spot in the mountains."

..... A hush fell over the cabin. The boys stood in a circle, each fellow with his arms around the shoulders of the ones next to him, and there, a hundred miles or more away from civilization, the boyish voices rose in the Boy Scout invocation:





"And now may the Great Scoutmaster of all good Scouts be with us until we meet again, one with the other."

The second annual winter camp had come to a close. When the campers stepped off the ferry boat the next morning a typical California sun spread its munificence from a cloudless sky . . . Sunny California.



## The Scoutmaster's Song of Maine

By Bert Leach

From Boothbay to Wiscassett,  
 In the glamor of July,  
 Spruce trees spire royally  
 To the clear blue sky.  
 The blood-stained Turk's cap,  
 And the lithe white rue,  
 And the royal purple vetches  
 Were diamonded with dew.  
 As we went to Wiscassett  
 And the day was being born,  
 Buttercups and chicory flowers  
 Wreathed the brow of morn.  
 The road to old Wiscassett,  
 In the glamor of July,  
 That I tramped with one-and-twenty boys,  
 Is mine until I die.

# The Universal Camera

By William P. Mattern

(Illustrated by the Author)

Inasmuch as the Ford is recognized as the universal car, due to its ability to get over the ground cheaply, it has occurred to me that it would not be improper to state my opinion of which is the camera that will give the greatest ratio of satisfaction in proportion to the amount of money spent. It seems to be the vest-pocket instrument.

For the beginner, there is probably no camera that will aid him more in making better pictures, because it can be used to photograph anything, as the illustrations attest, and always, the results will be satisfactory from an experimental point of view even if the picture is a rank failure. How can a picture that is a failure contain material for satisfaction? Simple. An amateur who wishes to learn will analyze his failure and finding out what is wrong, will have been improved, and that at the least cost.

With a vest-pocket camera, one can afford to experiment, even when the amount of money set aside for the hobby is small. They say that experience is the best teacher, and with this instrument the cost of such experience is less bitter because it is small.



*Bud*



*Court of Neptune*



*Vera*

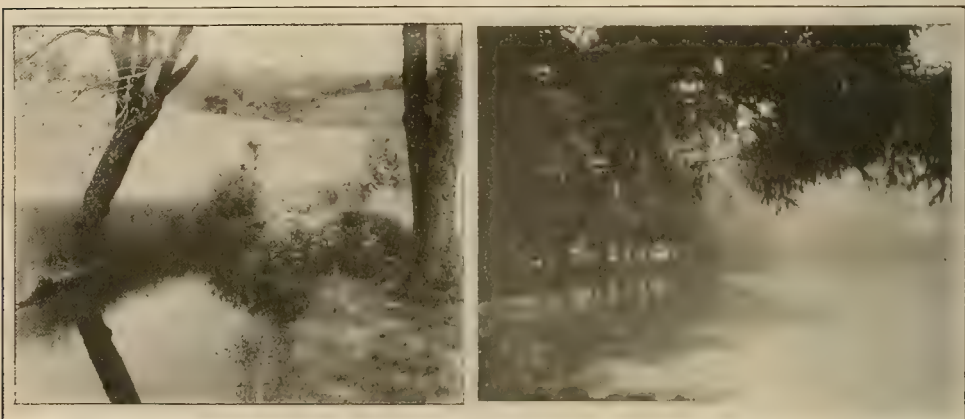
The illustrations are samples of what can be done by the average enthusiast—they are not artistic photographs, but neither can they be said to be poor. The amateur, generally, is more interested in a good picture than one that is too good, because he is not far enough advanced to appreciate the more artistic efforts. Grand opera often sounds horrible when heard for the first time; later, one learns to enjoy it. So it is with photographs. Beginners at first want a “clear” picture, and they use every trick they know to get it. Very few beginners are to be found who do not prefer “hard” papers—the more contrasty the better—to those of the other graduations. Portraits or machinery—always “hard”! But that is only at the beginning; after awhile he begins to recognize the merits of softer papers in conjunction with certain negatives and that is sufficient proof that he is advancing; and in time will “get there.”

"Vera," was taken in July, at noon. The exposure was  $\frac{1}{4}$  sec., at F:11 which was slightly "over" as more detail in the dress could have been obtained.

"Bud," was given  $\frac{1}{50}$  at F:22 which was the shortest obtainable with the camera used. The purpose was a picture of the boy; and the stream is truly frozen though the sun threatened to send it along its way in due time, because the attire of the boy will attest that it was warm enough. The time was 11 a. m. in January, on the hottest winter day in the history of the local weather bureau.

The "Court of Neptune" at the entrance of the Congressional Library in Washington was taken at 3 p. m. in October. Exposure given was  $\frac{1}{50}$  at F:8 the limit of the camera used.

Several of the pictures were enlarged and trimmed but all were made with the vest-pocket camera.



## A News Editor to Photographers

By Louis Wiley

**Remarks of the Business Manager of The New York Times, before the Camera Club of New York City**

The men and women who work with the lens are constantly winning added glory as artists, but it is of the camera folk as news reporters that I wish chiefly to speak tonight. They make a real contribution to our education, to our information of current events to give us pictures of news happenings, and a contribution to history as well. Whoever, two hundred years from now, writes the history of 1928 will have a valuable aid in the pictorial presentation of today's news, customs, fashions and personalities available in the files, supplementing the written word.

### Public Demand for Pictures

The extraordinary enterprise of photographic news services in the past twenty-five years has been mainly because of the public demand for that element of news in pictures. The photographs of the Bremen on Greenely Island were rushed out in two relays of aeroplanes and then by special train to New York. The printed word had preceded the pictures and we received an accurate and complete description of the end of the trans-Atlantic fliers' hop on the Labrador Island, supplied in Major Fitzmaurice's own story. The photographs of the Junkers plane and its heroic pilots on that bleak ice and snow gave a body to what our imaginations had painted. The camera man's



report of the stirring event illumined sharply what we had already read, gave a new interest to and a clearer understanding of the subsequent dispatches.

Until three years ago the news flash always outsped the picture by days. We might have news of an event on the Pacific Coast in a few seconds, and we waited for the fastest trains, or in rare cases the aeroplane, to bring the pictures across the continent. Now the telegraphic transmission of photographs is perfected, and wireless transmission across the ocean is in operation. Only recently we were shocked to read in our morning newspapers the full story of the collapse of the Francisquito Dam in California, bringing death to four hundred persons. In the same morning newspapers that carried the first story was a striking picture of the central section of the dam standing like an enormous tombstone amid the desolation of the valley. We read the story of the disaster with a clearer comprehension because of the news photograph. The first pictures of the San Francisco earthquake and fire were nearly a week in reaching New York.

## Pictures and Tabloid Press

Along with the increasing service the camera men render the reader in their presentation of events, the pictured news has come in for hostile and sarcastic criticism. Tabloid journalism is identified in the public mind with pictures as the main part of the news report. The tabloid mind is said to be the unfortunate kind that can understand only pictures and not the written word. Will Rogers said recently that the tabloid readers knew the tabloid code; if they saw a half page picture of a pretty woman they felt that she was probably either a murderess or a movie divorcee; if it was a full page she might be both.

But if we examine the criticism of the tabloid picture paper we see that it is a tribute to the photograph and a condemnation of the kind of journalism which emphasizes the cheap, the sensational and notorious. It is not an unfavorable comment to say, as is said of the picture, that every one can understand it. The news photograph may be the Henry Ford of news, but few persons have their feelings hurt by being called Henry Ford.

Years ago Mr. Dooley pointed his wit at the way newspapers illustrated a news story. If the heir of the Astorilts had a snuffle the yellow newspapers rushed out a page feature news story with pictures of the infant, his family, the home, General Coxe, Niagara Falls by moonlight and whatever else fitted into a nice layout. Today the news editor, if he wants a layout on such a topic, finds such wealth of material in his records that he could fill a half-page without calling on General Coxe or Niagara Falls.

## Pictures Aid in Telling the Story

The true place of the picture in the newspaper is as an aid to the full information given in the printed word. The photograph cannot ever take entirely the place of the news story; the reporter if he is an accurate, keen observer and has good powers of description can get along very well without the photograph. There are some highly important news stories which the photographer cannot really help in any way. If Secretary Mellon gives out a five column statement on revenues and tax proposals a photograph of our able head of the Treasury may assist to dress the page typographically but it does not add to the news in any essential way. On the other hand the first story of the appointment of Mr. Mellon to his post would hardly have been complete without a picture of him sure to interest every intelligent reader.

A few years ago the world was stirred by the discovery of a tomb of an Egyptian King which had escaped the grave robbers. The news stories were full and the descriptions were detailed and rhapsodic. But here was a news

story which defied the printed word alone to do it justice. As Howard Carter uncovered the glories of the entombment of Tut-anekh-Amen we tried in vain to picture in our minds all that he had found. It was not until the glorious photographs arrived that every one, however ignorant of Egyptology, could see clearly the wonders unearthed in the Valley of Kings. On such a story the camera scores a news triumph.

The Times recognizes the news value in pictures. The Times was the newspaper in the United States to introduce the rotogravure section. This was probably the greatest stimulant to the improvement of news photographic services in the history of journalism. This process reproduces pictures with rare fidelity and with beauty of tone. The first rotogravure news picture section was issued less than a twelve-month before the beginning of the World War. It performed a great news and historical service in presenting the pictures of that conflict. Some seventy newspapers throughout the United States now issue rotogravure picture sections. If there is any criticism to be made of them it is that some of the editors do not realize that news is the essential ingredient of a successful section.

The Times organized in 1919 the Wide World Photo Service because it recognized that readers were entitled in the rotogravure section to the best news pictures that could be gathered. This service has bureaus in cities abroad and in the United States and several hundred photographer correspondents throughout the world. Its endeavor is to equal The Times news department in enterprise. The chief of the Wide World is an able, energetic gatherer of camera news.

A great number of expeditions of adventure, exploration and scientific interest covered exclusively by The Times Wide World Photo Service almost rivals The Times own record in reporting exclusively the personal narratives of the leaders in these events. The Byrd and Amundsen-Ellsworth flights to the North Pole, the discovery of Tut-anekh-Amen's tomb, which I have already mentioned, the Roosevelt search for the *ovis poli*, the attempt to climb Mount Everest and other expeditions to Africa, Labrador, Greenland. New Guinea, the Island of Komodo, are among the historic voyages exclusively to the credit of the Wide World service. We shall be looking forward soon to the Byrd flight to the South Pole and the photographic plans for their expedition will be so elaborately and carefully made that we shall gain a new idea of the grandeur and the terrors of the Antarctic regions. It is even possible that we may see within a few years photographs of the markers which the intrepid Amundsen and the immortal Scott left at the South Pole.

### **The Use of the Camera in Advertising**

In advertising, too, the camera constantly wins greater triumphs. If we omit the finest portrait work, the most striking examples of the camera worker's art is certainly to be found in modern advertising. I am daily impressed with the extraordinary beauty and boldness of composition of the photographs illustrating the advertisements in our newspapers and magazines every day. This use of illustration in advertising as much as any one factor is responsible for the increased public interest in beauty and artistic appearance of what it buys. The great sales value of attractive appearance is powerfully used in photographic advertising illustrations.

So far as I know, no collection is being made of photographs of great current historical events. The services of the camera to history in recording the outstanding happenings of the day should be fittingly recognized. A great library such as that of Harvard or Columbia University might undertake the preservation of such a collection to be added to constantly. The pictures should be selected by a well qualified board of editors and scholars and suitably catalogued.

# Lecture Notes on Photography

By Professor Edwin A. Sperry

Pei Yang University, Tientsin, China

Illustrated by the Author

(Continued from September Issue)

## *Unequal Illumination*

It will often be noticed that the negative is not so dense at the outer edges and that these portions seem to have been less exposed to the light than the central portions. This is a result of unequal illumination or that the central portions have had a greater amount of light applied than those portions at some distance from the center.

This is due to two causes; one being mechanical and the other physical. The first of these is that the lens has been so constructed as to cut off some of the rays of light which have come to the lens in an oblique direction. This defect can be corrected to a great extent by making the lens mounting very short and not having the barrel extend out beyond the lens at either end so as to give an unobstructed path for the diagonal rays of light. Another way is to make the diaphragm just small enough to cut off the direct rays until they are of the same extent as the angular rays, but this will, of course, lower the speed of the lens very materially, which is sometimes a very important consideration.

The second cause is physical or, we might say, mathematical, and is due to the fact that a ray falling directly onto a surface will give an image of the same size as that of the ray itself, giving its full power to the surface covered. If the ray falls onto the surface at an angle it will cover a space larger than the ray itself, owing to the fact that it is at an angle. This will cause a correspondingly lower density. It is quite impossible to correct this defect as it is inherent to the position of the ray itself.

## *Types of Lenses*

From the above description we can see that lenses can be classified into the following classes:

Single lens with one element, correcting aberration,	No. 1
Single lens with two elements, correcting aberration	No. 1-2-3
Single lens having three elements, correcting aberration	No. 1-2-3-4
Single lens having four elements, correcting aberration	No. 1-2-3-4-5
Double lens having one element in each system, correcting aberration	No. 1-2-3-4
Double lens having three to five elements in each system, correcting aberration	No. 1-2-3-4
Double unsymmetrical lens having two or three elements in each system, correcting aberration	No. 1-2-3-4-5



Besides the above there are a number of types which are composed of irregular systems which could hardly be classified with these but are used for special work. As an example, we have the Cooke-Taylor lens which is composed of two very dense positive elements, between which, and separated from them by air spaces, is placed a double concave or negative lens of less density, the refractive power of which is practically equal to that of the two positive elements, but making the resultant power positive owing to the intervening air spaces. This lens is highly corrected and has a very high illuminating power which makes it especially useful in photoengraving processes.

In the trade lists of hand cameras the prices are governed by the type of lens equipment, ranging from a very few dollars for those having the simplest lenses to one or two hundred dollars for those equipped with the highest grades.

## ILLUMINATION

### *Diaphragm*

Although the diaphragm can be considered as the simplest part of the lens, its purpose and functions are most important. In the descriptions given above, it has been clearly shown that it plays a very important part in some of the corrections of the defects in lenses.

It might appear at first glance that the same result might be reached by making the size of the lens smaller, but if we examine the diagrams we will see that the working surface of the lens is much larger than the area of the diaphragm and that the principal function of the diaphragm is to select certain portions of the pencils of light which come to it, both directly and at an angle, which will have the greatest uniformity of action.

As we have seen, the proper position of the diaphragm is of great importance. For example, when used with a single lens, if placed in front a negative distortion is produced, if behind the lens, it will give a positive distortion. Again it was shown that if it is placed at a proper distance from this single lens it will tend to flatten the curvature of the field. Again, if it is located at the proper point between the systems of a double lens, it will entirely neutralize distortion.

Another important use of the diaphragm is that of increasing definition in the picture and increasing the field of definition to a considerably greater size than the normal or indicated field of the lens. This is done by reducing the size of the aperture down to the smallest permissible diameter. The principle governing this is based on the control of the size of the "circle of confusion." In explaining this we must return to the statement made above that we have the circle of confusion in the image produced by the lens just the same as in that produced by the "pin-hole," but from entirely different causes. With the most perfect lenses a point of light in the object is never shown as a perfect point of light in the image, owing to the fact, as stated above, that no lens is absolutely perfect. The larger the working surface, the greater the

liability of imperfection. This is especially true of the rays passing through the outer edges of the lens. By cutting out these marginal rays and confining the working rays to those near the center, there is a much greater possibility of having a more perfect image. Again, the image is liable to be more and more imperfect, even with the highly corrected lenses, as the distance increases from the center of the plate.

As has been stated above, the maximum size of the circle of confusion in any lens is assumed, say 0.01 of an inch, and the distance from the center of the plate, the axis of the view, at which this circle passes this maximum, is assumed as the limit of the covering capacity of this lens. This is taken at the full aperture. For example, we have a lens which is designated as being f:6 for a plate 4x5" in size. This means that with an opening of f:6 a plate 4x5" will be fully covered without exceeding the assumed diameter of the circle of confusion to the very edges, or, a circle about  $6\frac{1}{2}$ " in diameter. The maximum diameter of the circle of confusion is variously assumed ranging from .005" to 0.01" according to the class of work to be done. In the cheaper grades of lenses this may be even greater but the definition is poor in pictures taken by such lenses.

The sizes of the apertures should be fixed in order to have some standard by which to regulate the relative action of the lens. In order to do this, several systems have been devised which are based on different factors. We will mention three of the principles on which these systems are based as they cover those most commonly used: (1) the ratio between the equivalent focus of the lens and the diameter of the aperture, (2) the relative time of exposure assuming a certain aperture as a unit, (3) the relative amount of illumination assuming a certain aperture as a unit. These are named in the order of their importance as regards their general use.

The first method is based on a fixed value; that of the equivalent focus of the lens, and, inasmuch as the power of illumination is practically expressed by  $1=(D)^2$ , the sizes will always hold a relative value regardless of the size of the lens. In using this system it is customary to start with the opening at which the lens is rated or graded, and from that to construct a successive range of sizes in which each size will require twice the time of exposure as will the opening next smaller. This is sometimes varied so as to give a scale of sizes starting from, say, f:4 as a unit, making each successive opening such as will require twice the time of exposure as the one before it.

In the second system, a certain aperture, say f:4, is assumed as a unit and the scale of sizes, starting from this unit as 1, are numbered 2, 4, 8, 16, 32, etc., indicating the time of exposure for each aperture relative to the first. In some cases the rated aperture of the lens is used as the unit and the scale constructed on this, but this, as can be seen, is liable to lead to confusion as each lens will have its own values and in

changing from one lens to another a different relative scale must be assumed.

The third system, or that by which the degree of illumination is directly designated, the smallest practical opening, say  $f:90$ , is used as a unit and the scale so constructed as to give each successive aperture twice the illuminating power as the one immediately preceding it. This is very seldom used. The following table shows approximately the relative values between the three methods. Fractions are omitted in the "f" system:

"f" value	$f:4$	$f:6$	$f:8$	$f:11$	$f:16$	$f:22$	$f:32$	$f:45$	$f:64$	$f:90$
Time	1	2	4	8	16	32	64	128	256	512
Illumination	512	256	128	64	32	16	8	4	2	1

## Law For the Photographer

By M. L. Hayward

### "ON CARS NOW LOADED"

The photographer had bought goods from Y, Z wrote Y that he would endorse trade acceptances drawn on the photographer for "cars shipped and now loaded." The goods contracted for made 3 carloads, one had been shipped, and one was loaded when Z wrote his letter, Z endorsed and paid trade acceptances for these two cars, but refused to endorse for the third car which was loaded and shipped several weeks later, and the Supreme Court of Washington ruled that Z was under no liability for the third car.

"The letter reasonably read is not subject to the construction that it constitutes an endorsement of the trade acceptances on other than cars already shipped and the car which, at the time, was loading, and the car in this suit, having been then neither shipped nor loaded, did not come within the guaranty," the Court ruled.

### WITH DRAFT ATTACHED

If a photographer sells goods to a customer, and draws a draft with the bill of lading attached, sends it to the Brick bank, the customer pays the draft with a check on the Sand bank, gets the bill of lading, sells the goods to X, draws a draft with the bill of lading attached, and hands it to the Sand bank.

"I just gave the Brick bank a check on you to cover this same shipment and take up the bill of lading," the customer told the Sand bank, but the Sand bank applies the proceeds of the draft to the payment of the customer's notes held by the Sand bank, and when the check comes in from the Brick bank, it is dishonored.

Can the Brick bank issue an attachment, and seize the goods covered by the bill of lading?

"Nor would knowledge of the outstanding check make it obligatory upon the Sand bank to retain the deposit to meet it," says the New York Courts in ruling against the Brick bank.



# Camera Work of Moving Pictures For the Amateur and Professional

By Ernest M. Reynolds

Illustrated by the Author

(Continued from September Issue)

The outstanding feature of the following explanation is that a character may walk from one side of the set to the other with ordinary ease. To say the least, the effect is quite startling to those who have made only a slight study of the art.

For explanatory reasons it probably would be better to say we have just an ordinary room scene with the customary pieces of furniture. Let there be placed, in an appropriate position, a chair of rather massive proportions, with a back just a trifle higher than the head of a person seated. The camera is placed so as to take in the room scene in general, but care taken to feature the big chair. Next have a black cloth in back of the chair and work down the aperture of camera until it just nicely takes in the entire chair.

With the black background set, nothing is visible now but the chair. Place your actor in the chair, and as long as all parts of his body stay within the general outline of the chair he can be perfectly normal in his actions.

Like all other trick exposures, the theme or business of the scene should be known beforehand so as to time the action which takes place. This decided upon, the scene may be made of the person in the chair, talking, laughing, or even accepting a letter handed to him from outside the range of mask in camera. Care again should be taken to note exactly the footage or place on film where this takes place.

Let it be understood that we now have made the first exposure of our double exposure picture. Attention must be given the chair so that it is not moved upon the floor. Also exercise the same care with camera. Remove black cloth from in back of chair and the mask from camera. Next take a thin black cloth and drape the chair in such a manner that said drape conforms as nearly as possible to the outlines of the chair. This may mean that the cloth must be pinned or folded in here and there, if there are any fancy outlines to the chair. Great care should be taken with this step of the work, for a large portion of the success or failure of the picture rests upon this detail. The lens is closed and the film rewound to the starting point of first exposure.

The character who was in the chair may now take the other role, keeping in mind the footage marks for coincidence with dual part in first exposure. The feature of this type of double exposure is

quite evident as the character may move about at will over the entire set. The chair should be forward enough so as to allow the player to move in back of it, thereby completely crossing the stage, a thing which is seldom done in double roles. If care is taken to move quickly, of course without making it too noticeable, the second character may move in front of the chair, but this is hardly advisable, except as an experiment. Another point, the second exposure is not limited to the number of people in the scene together with the dual character. With a little thought many ideas will present themselves whereby the same procedure may be used with variations.

It is sometimes necessary to make a double exposure in a portion of the picture which already has a well lighted subject, or at least where the exposure is normally dense. In such a case use a piece of thin, clear glass fitted into the mask box. Place a little photographic opaque on just the portion of glass which would result in a shaded or black spot upon the negative, if it were developed after using only this mask. Carefully note the position of this mask in box by marking the corners, etc., and then remove. Shoot the scene as ordinarily, but at point where double is supposed to appear, fade out. Now insert mask. Reverse film to beginning of fade out. At this point fade in and run the desired footage and fade out again. Remove mask, reverse film to point of starting of second fade out. Now fade in and grind camera as usual to finish of scene. In this type of double the important point to remember is the footage at which point you started the first fade out, and at what point the second fade out took place. This now limits the duration of the second exposure or double. Next take the glass or transparent mask and make a reverse of it, either upon glass or by cutting the correct size and shaped opening in black cardboard. This in turn is placed in mask box and used to eliminate all portions of the scene except that part which will be used for the record exposure.

The mask placed, close the shutter or other suitable means of closing camera lens, turn the film to the point where first fade out started. This is the point at which fade in the double exposure. Run film to footage noted for second fade in and start fading out. These fade ins and outs should be noted carefully and accurately enough as to cause a perfect blending of exposures at all times. Unless a camera with an automatic dissolving shutter is used, the blending is sometimes rather difficult. However, practice makes perfect, and some of our best pictures have been made with equipment which was extremely antiquated and discouraging to handle.

There are an unlimited number of trick or double exposure effects which in the main are built up from the examples here given. Some are quite simple and others very complicated and need special equipment; but if the aspiring cameraman will first master the effects described the others will come quite easily, and better yet, new ones

will present themselves after having an inner knowledge of the major principles of trick photography.

An effect often used, especially in close-up work, is the soft focus. Probably no other late development of the photographic art has been given more space in literature or study, by artists in the work, than that of the soft focus and the ways and means by which it may be produced. Soft focus may be described as an effect which softens all sharp lines of definition and brings the whole picture into a realm of partial indistinctness. This softening of focus is most effectively obtained by the use of a specially designed lens for soft focus work. Another very effective means is by placing black gauze over the lens or, better still, by inserting a mask form covered with gauze in the mask box. For the benefit of those who are still in doubt as to just what is meant by gauze here is a suggestion. The writer has had very good results using thin black georgette. Naturally, when using this method, the reduction of the exposure is quite marked. To compensate for this fact, either a larger iris opening must be used or, in case of artificial lighting, an increase in quantity of light. It is always advisable to focus without the gauze in position.

When artistic photography is in the making, the cameraman may delve into his assortment of masks without a moment's hesitation. However, as reason and sense should be used on all occasions, a general suggestion may not be out of place. When a number of prominent characters are visible at the same time, care should be exercised in not masking too much. A slight diffusion around the entire screen is much more effective. The fewer players there happen to be in a scene, the more is masking licensed; until we finally come to the gem of all that is beautiful in the cinema art, the close-up. Here lies the haven and land of opportunity for the photographer with an artistic temperament. You may mask and soft focus to your heart's content, only we plead of you, get something original.

When one character plays more than one role it is necessary to use a mask if the actor appears in the two different characters in the same scene. Whenever this type of trickery is attempted the scenario must also be arranged to conform to it, so that the action of scene will lend itself to double exposure work. The most difficult part of exposures for dual character is the timing of the action of the players. Also, if the double character comes very close together, great care is necessary in order to have them know just how far to move so as not to go over the limit of the mask. A common double exposure for a person playing the dual role is to mask one-half the scene and photograph with the character in action, being careful, of course, that they do not move over the half-way mark, as this would obliterate them from view caused by the position of the mask. Say, for example, there is a table in the center of the scene and this



character sits down to the table on the side which is in view. This person can carry on a conversation and finally rise, leaving the room. We now have but one side of aperture exposed, and in order to complete the double exposure, the film must be rewound in camera with lens or shutter closed. Without moving camera or anything in the scene, the second exposure is ready after adjusting the mask so that the already exposed portion of film is now masked and the unexposed left open to the lens. The second exposure is now made with the same character coming to the opposite side of the table from which he first sat. Any action is possible, just so the imaginary line is kept uppermost in everyone's mind. It is sort of a dead line, so to speak, and to cross it is fatal to the resultant trick picture. If extreme care is taken as to the position of the character, many striking scenes are possible. For instance, a person can be made to shake hands with himself if exact position of hands is noted. The extended hand must go just to the division line or mask, and if very slightly past or over the line the effect will not be disastrous, as the motion of hands will tend to obliterate any little discrepancy in the positions. However, if the scene brings the hands fairly close to the camera, the registration of hands must be as near perfect as possible. This division line of mask is always less prominent when it is set so as to produce a sort of hazy line down through the picture, for when the two exposures are finally made these edges blend into one another, and the detection of dividing line is much more difficult. The description of this piece of trickery will give rise to a number of ideas which can be worked out with identically the same procedure. A volume could be written upon the subject of dual roles and the various ways of working out certain effects. In the case of a star doing a double role, it will always be found that there actually is a double in general appearance, for the star character. The most important feature is to have this double look like the star himself from a back view. In this manner many scenes which would otherwise be impossible are made without resorting to the double exposure.

A very ludicrous scene may be made, using a tall but very spindling tree, say about three inches in diameter. Mask the scene so that the dividing line comes down through the tree trunk. Now have a character peek out from behind this tree. Have them look out two or three times as if following someone, then they can come from behind the tree and walk out of the scene. Next, reverse the masking side, being careful to keep the division line down through the tree trunk. Wind the film back in camera and make ready to photograph the scene. Leave out the character this time altogether, merely exposing the scene upon the film. When this piece of negative is finished, printed and projected upon the screen it will be found to contain quite a laugh. The person in the scene appears to be no broader than the three-inch tree. This is a stunt used quite fre-

quently in comedy pictures and has a number of variations, some of which will present themselves to the photographer after a little experience.

The double exposure system which has been used in the foregoing explanations depends entirely upon the use of masks. A common expression often used to label this type of trickery is "split stage" work. This term explains the method of exposing the film in a very satisfactory way, for it is true that the stage or scene is virtually split in half, or at least divided into two parts. It can readily be understood that the characters have a very limited space in which to work and, above all, the division line must be kept in mind. Another point quite apparent is the fact that a person cannot move from one side of the stage to the other in this simple form of masking.

It was this very fact which led to considerable experimenting upon intricate double exposure work.

As suggested before, the spaces in which players must work are very small when making a trick picture of the split stage variety. It was for this reason that a more workable and less limited double exposure method was devised.

## Photography in Science

By Professor Ingo W. D. Hackh

College of Physicians and Surgeons of San Francisco

(Illustrated by the Author)

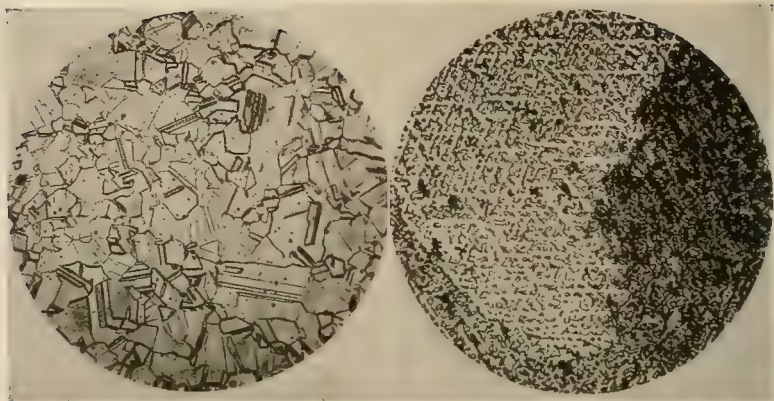
In photographing a surface, be it the microscopic etching figures of an alloy or the macroscopic landmarks of a country-side, the fundamental principle of photography: exposure, or the amount of illumination, is not the only factor to be considered. The angle of the illumination, or the position of the camera to the source of light is also of paramount importance, as by this means the character of the surface, whether small or large, is brought out. This holds for microphotographs as well as for aerial views. We may perhaps divide surface photography into:

(a) Microphotography—where the area to be photographed is smaller than the image.

(b) Life-size photography—where both, object and image, are of the same size.

(c) Macrophotography—where the apparent area of the object is larger than the photographic image.

This simple classification will aid toward understanding the problems of each group, for one can see readily the gradual transition



*Metallographs of Alloys*  
 A1 A2  
 Courtesy Bausch and Lomb Optical Co.

in passing from *a* to *c*, namely from relatively long exposures and bright artificial light sources, to short exposures and the use of light-filters.

### MICROPHOTOGRAPHY

The colloidal state of matter may be defined as the dispersion of small particles of one material in another material. The particles may be solid or liquid or gaseous, and are called the inclosed or discontinuous phase of the colloidal system; the medium in which they are suspended or dispersed may likewise be solid, liquid or gaseous, and is termed the continuous or enclosing phase. Such colloidal systems range from the salad-dressing, milk, and jelly to paints, varnishes, rubber, brass, and some of the precious stones.

Many properties of a substance are surface phenomena, and as with an increasing subdivision of a substance its surface is increased it follows that in the colloidal state the surface properties are at their highest. For this reason there are many industries where colloidal phenomena are important and their study essential for the control of processes and the selection of materials; as, in the manufacture of paints, glass, textiles, and steel.

The metallographic camera enables the engineer to study the properties of his materials and to avoid waste of time and money by eliminating unsuitable substances and tools. Chemical analysis tells us the composition of an alloy, but it does not inform us of its physical history, that is, the treatment which the mixture of metals has received and by which it has arrived at a particular and peculiar colloidal form of intermingled crystals. Tempering or annealing, rolling, drawing or hammering, all affect the crystalline structure of an alloy, and thereby influence its properties. In this field the metallographic camera is supreme, for it gives a permanent record of the metallic surface, which may be etched with various acids to dissolve





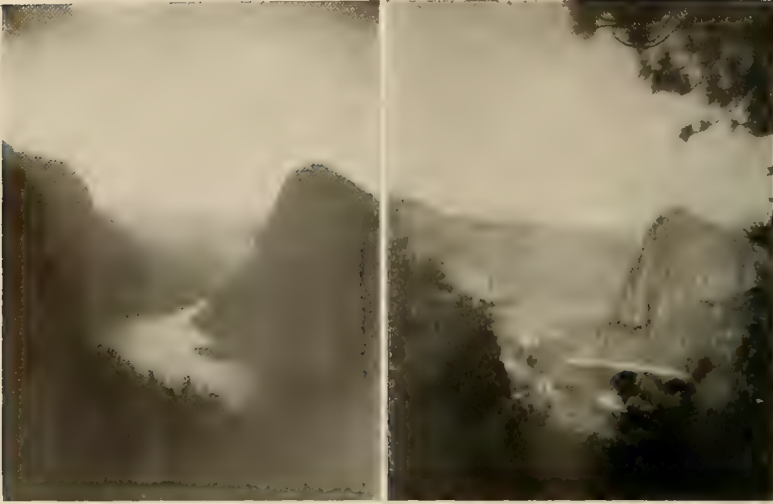
THE AUTHOR AT THE AGE OF 5

An instantaneous exposure utilizing flashlight in conjunction with daylight.  
A life-size picture reduced for reproduction.

one or the other type of crystal and which may be illuminated obliquely from different angles, and thus bring out the characteristic boundaries between the particles and their size. All this aids towards prediction of the properties of the alloy.

### LIFE-SIZE PHOTOGRAPHY

By life-size photography we mean the condition of object and image being of the same size. Generally, only small objects are taken directly "life-size," and whenever a larger image is needed, we resort to an enlargement. This is economical, but many details may be lost in the process of enlargement, which has also its limitations, due to the grain of the plate. X-ray photography is always "life-size," as the very short-waved X-rays pass, in a straight line, through materials, including glass, and are thus not refracted by a lens.



5 A. M.

2 P. M.

*Kolano Rock and Hetch-Hetchy Lake*

It was during the nineties of the last century that my father engaged in a photographic adventure which was valiant and brought him laurels, but which was economically unsuccessful and financially disastrous. His purpose was to bring portraiture to such a state of life-like perfection so that a print would represent the face in its most minute details with microscopic accuracy. Realism was carried to the extreme, and not often was this exactly pleasing to the subject, and at the present day fashion of soft focus lenses, this goal sounds strange,—nevertheless it is of great scientific value for the anthropologist, and such photographs of leading personalities are of historical importance.



## CAMERA CRAFT



SAN FRANCISCO PENINSULA

Courtesy Fairchild Aerial Surveys, Inc.

In a subsequent installment it shall be my privilege to touch somewhat more thoroughly on the subject of photographing things of great magnitude—Macrophotography—and in the near future we shall deal with Criminology and Photography. The camera has proven one of the world's best detectives—in fact a master Sherlock Holmes.

(To be Continued)







FIRST AWARD

*K. Takahashi*

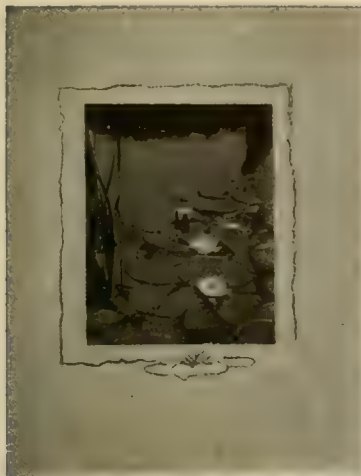
*Advanced Class*

Dr. P. B. Atwood  
Miss K. Berger  
Louis Bond  
K. Burgersdorfer  
A. F. Couchon  
Miss M. Derwent  
Dr. P. Elfridge  
Ig. L. Emanuel  
J. K. Emmonds  
Clarence Feltmann

Alexander Fetz  
Adolph Franz  
T. Furuya  
C. A. L. Gall  
H. T. Hara  
Dr. M. Hinman  
K. Inouye  
H. Jenkins  
H. S. Kaito

F. Lefvre  
Mrs. James Loftus  
A. Pfennigbauer  
Frank L. Rogers  
Harry Samuelson  
Mrs. P. M. Sutton  
K. Takahashi  
Dr. Max Thorek  
Hacka Uricki  
W. A. Watson

# CAMERA CRAFT



OCTOBER ADVANCED



SECOND: *T. Kawaguchi*  
FOURTH: *Fr. Pfennigbauer*

THIRD: *Karl Burgersdorffer*  
FIFTH: *Dr. Max Thorek, M. D.*



FIRST AWARD

*T. K. Tsukane*

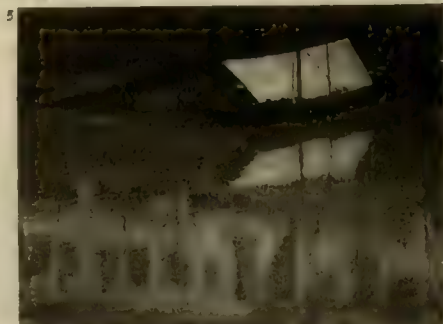
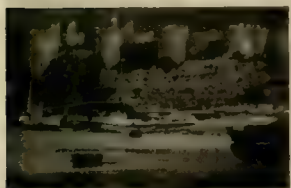
*Amateur Class*



# CAMERA CRAFT



## OCTOBER AMATEUR



SECOND: *A. W. Clark*  
FOURTH: *W. A. Watson*

THIRD: *Mrs. W. F. Eldridge*  
FIFTH: *Y. Osada*

Robert N. Adams  
Edward Alenius  
Mrs. L. Ames  
Ramos Avel  
Kenneth D. Best  
Alec Blackie  
Dr. F. W. Burcky  
C. C. Chan  
H. A. Chapin  
A. W. Clark  
O. W. Conrath  
J. Daisy  
Dr. B. Amos Denton  
Mrs. W. F. Eldridge  
Elbert Fink

Miss Josephine Fisher  
Dr. Frederick Fowler  
A. S. Githens  
Malcolm Greasley  
Lock Shing Hong  
M. F. Hotchkiss  
Miss J. Inman  
H. J. Iversen  
Harry K. Jones  
T. Kawaguchi  
Walter Kidd  
K. Kajineoto  
Rene Loudon  
Dr. Lewis S. Mace  
K. Mathies

Donald W. McKay  
I. R. F. Nevremont  
Joseph Newman  
Y. Osada  
F. L. Owen  
Dr. L. Patterson  
P. Peterson  
W. R. Rodgers  
K. Shimizu  
T. K. Tsukane  
S. Tsutsui  
Ernest W. Tyler  
M. Uyeki  
A. Weschler



## THE SENSE OF BEAUTY

The appreciation of beauty is as inherent in humankind as the love of comfort and ease. In fact, paradoxical as it may seem, comfort and sense of the beautiful are almost the same. To amplify, the lines of beauty affect the eye as significant of ease and rest. The angles that give a feeling of disquietude and which are not modified by other contexts affect us as tiring and with nervous excitation.

The sense of beauty is an attribute of the higher form of life. Having summed up complex perception as the product of our five senses, we still have to account for understanding, reason, logic. Perception and conception are as antonymous as induction and deduction. Thus, we hear a wonderful musical composition. It enters our perception through the ears, but what we conceive and the divine emotions it inspires are subconscious phenomena that are very like the functioning of a soul.

It may be said that God has planted within His living creations a bit of His divinity with the faculty of growth. It is there from birth; it exists in the savage, but it is refined, cultivated, trained to consciousness with a larger development of mind, with a finer development of the senses. The savage worships the hills, the sun, the stars, impressed with the size and dominance in his cosmos, but were they ugly we may accept that he should as naturally turn from them to other things that appealed to the sense of which we speak.

Some there be who seem to lack all appreciation of music; some of painting; some of poetry; others lack, or rather seem to lack, all appreciation of what is beautiful on earth. This, I hold, is rather a perversion than a lack. Born with eyes, one might neglect cultivating observation.

And this leads us to volition. Environment and heredity are potent factors, but that heavenly spark of which I have spoken may be fanned by will to a bright flame. We have within us, too, the Providential Gift of conquering environment and heredity, of aspiring to divine attributes or of degenerating to the level of the beast that wallows in filth. We may learn to look up at the firmament, to revel in the colors of the flowers, to afflate in the cool, dark shadows of the forest, or we may ignore all that is fine and glorious in nature and dig our noses in the slime. We may sing with what voices we have, or use our throats to screech like the inmates of Bedlam. We may consecrate our minds to clean thinking, to kindliness, to the loftiest inspirations, or we may defile our thoughts with smut and evil, spite, ugliness.

Yet shall we have to insist that this sense of beauty exists even in the worst. Poor, starved thing that it be, it has betimes awakened to a passing vigor at an unwonted touch and evinced itself, startlingly.

Making pictures seems to appeal to more humans than making sweet sounds or thinking lofty thoughts. We feel the urge in extreme youth. The race had attempted pictures long before it arrived at efforts in the other arts. In our own period and stage of progress a vast contingent wants to make pictures and cannot with pen, pencil or brush. Here comes the camera. With the magic box and bit of glass, pictures may be made that in some degree express the emotions. Make much of photography. Do not satisfy yourself with merely snapping a shutter. You may waste films as you carelessly use words or wantonly waste thoughts, or you can observe, study, feel, and so learn and improve to a point where the sense of beauty within yourself shall produce what shall better others, give them pleasure, carry on the banner of greater, better civilization.

## CAMERA CRAFT

Search for the embryo sense of beauty within yourself if you have not already found it. Do not encourage its attrition. Let the "primrose by the river's brink" be more than a "Primrose, nothing more" to you.

Attune your mind to the infinite and you shall hear the music of the spheres. Sharpen your vision to the universe and you shall see your God in His handiwork. Thus you shall learn to know that Faith begins where reason ends, and shall not try to explain, with material laws, what cannot be taken as material. Beauty is not a quantity, if words can give my meaning, but a spiritual essence that will not lend itself to measurements, since it lacks dimensions.

### THE RIVER

By Sigismund Blumann

#### I

The brook finds birth at some neglected  
spring  
That dribbles on till it becomes a stream  
Upon whose banks the curving willows  
dream,  
And wild birds hop while resting from the  
wing.

#### II

It gains in strength and when it cleaves  
the fields  
It is become a river wide and deep,  
Beside whose flow the rustic hamlets  
sleep  
In comfort at the coolness that it yields.

#### III

It was a babe within the rocky wild  
Where first it babbled on among the  
ferns  
And tantalized the wanderer with its  
turns:  
Young in its ways like any other child.

#### IV

But it has grown to dignity and now  
It is a mighty river, and it goes  
Where, when its current strongly flows,  
It does not fear to turn the king's own  
prow.



#### V

Ah, pride! Ambition! So like human state  
That rivers glisten and move proudly on  
With but a faint regret for green fields  
gone,  
And ever rush ahead to gain their fate.

#### VI

The sea is reached, and when the waters  
blend,  
What signs remain to show for all the  
pride?  
The gurgle drowns within the roar. The  
tide  
Absorbs the river's waves, and so the end.

#### VII

The birth, the mother's breast, and days of  
youth,  
Old age and death, the story endeth so,—  
Are like events that mark the river's  
flow.  
The dams that turn it are perverted truth.

#### VIII

The river soon forgets the meads it knew.  
And do you think the fields recall the  
stream  
When fresher waters breed the woodland  
dreams?



The rose at eve forgot the morning dew.

#### IX

Yet flow along. And as for mortal me,  
I would not stop, e'en if I could at will,  
On, ever on, and onward still,  
Until my current loses in the sea.





## Association News

JOHN R. SNOW, Mankato, Minnesota, *President*  
CHAS. AYLETT, Toronto, Canada, *1st Vice-president*  
D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*  
GEORGE STAFFORD, Chicago, Illinois, *Treasurer*  
C. W. HOWSON, Minneapolis, Minn., *Chairman Commercial Section*  
PAUL TRUE, New York City, *Chairman Manufacturers Bureau*  
L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*

### A NATIONAL COMPETITION

The Board of Directors of the P. A. of A. announces a new competition for the Portrait Section of the Picture Exhibit at the Forty-seventh Annual Convention.

The Board has recognized for a number of years that the quality of the work in the Portrait Section at our Conventions has not been what it should be, and on the contrary the standards of craftsmanship in the Commercial Section have been improving steadily, not only from the point of view of quality but quantity. One of the reasons ascribed to this has been the competitive spirit that has been made manifest by the exhibits from the various commercial clubs.

The Board of Directors desires to foster this spirit of competition in the Portrait Section and has decided to award two prizes, one a silver loving cup and one a silver tray. The cup will be awarded to the best club exhibit containing fifty prints or more. The tray will be awarded to the best club exhibit containing less than fifty prints.

The loving cup is fourteen inches high. It is the Edgeworth, an eighteenth century colonial pattern, and is one of the most original that has even been designed. Its classic outline, supplemented by an ornamentation of water leaf and fine bead identify it as a high achievement of the Gorham master craftsman.

The tray is solid silver, fourteen inches in diameter. It is the Louis XIV pattern and is an example of the decorative trend of the finest work of American artists and craftsmen. This motive, as the name indicates, carries us back to the glory of the French Court of "Louis, the Magnificent." Each decorative feature, from the conventional carnation on the tip to the charming

flowerettes near the bowl, falls into its place in perfect harmony.

The rules governing this exhibit are as follows:

1. All prints exhibited by any club must be the work of a member of the P. A. of A.
2. Each member is limited to one print in a club exhibit.
3. All prints must be mounted in a uniform manner. The character of the mount is left to the discretion of each club.
4. Pictures that are colored or have other handwork or are produced by other means than photography will be prohibited.
5. No frames or glass will be permitted on any prints shown.
6. All prints must have the name and address of the exhibitor as well as the name of the club.

The Board of Directors decided to restrict this competition to purely local or semi-local clubs or associations. It was felt that it would not be fair to have such large organizations such as the Photographers' Association of Middle Atlantic States, the Photographers' Association of New England, the Pacific International Photographers' Association, etc., compete against exhibits by purely local clubs such as Detroit, Cleveland, Chicago, etc.

Neither would it be quite fair for associations whose membership was highly selective, such as the Cameracraftsmen, Ohio Society, etc., to compete with clubs of general membership such as the Southeastern Missouri, Finger Lakes Association, Triangle or some other clubs of general membership.

The list of societies that are eligible to this competition is given below. If any clubs that come under the above heading are not included in this list, they should write to the Secretary at once.

## CAMERA CRAFT

Birmingham Photographers' Club.  
 Photographers' Club of Southern California.  
 Ventura Photographers' Association.  
 Denver Photographers' Association.  
 Northern Colorado Photographers' Association.  
 Professional Photographers' Society of St. Petersburg.  
 Atlanta Photographers' Association.  
 Tampa Professional Photographers' Association.  
 Central Illinois Camera Club.  
 Chicago Portrait Photographers' Association.  
 Rock River Valley Photographers' Association.  
 Professional Photographers' Association of Huntington, W. Va.  
 Northeast Iowa Photographers' Club.  
 Professional Photographers' Club of Central Iowa.  
 Northeast Kansas Photographers' Club.  
 Southeast Kansas Photographers' Club.  
 Southwest Kansas Photographers' Club.  
 The Photographers' Association of Louisville, Ky.  
 Professional Photographers' Club of Worcester, Mass.  
 Associated Photographers of Grand Rapids and Western Michigan.  
 Detroit Portrait Photographers' Association.  
 Photographers' Association of St. Louis.  
 Range Photographers' Association.  
 Northern Minnesota Photographers' Association.  
 North Missouri Photographers' Club.  
 Southeastern Missouri Photographers' Club.  
 Southwest Missouri Club.  
 Associated Photographer's of Kansas City.  
 Society of Professional Women Photographers of New York City.  
 Professional Photographers' Association of Eastern New York.  
 Photographers of Passaic, N. J.  
 Professional Photographers' Club of Paterson, N. J.  
 Finger Lakes Association of Photographers.  
 New York Photographic Business League.  
 Professional Photographers' Association of Syracuse.  
 Buffalo Section of P. P. S. of N. Y.  
 Professional Photographers' Club of New York.  
 Eastern Carolina Photographers' Association.  
 Mahoning Valley Association.  
 Photographers' Association of Columbus, Ohio.  
 Professional Photographers of Cincinnati.  
 Professional Photographers of Greater Cleveland.  
 Southeastern Ohio Photographers' Association.  
 The Photographic Association of Canton, Ohio.  
 Portrait Photographers' Association of Portland.  
 Willamette Valley Professional Photographers' Association.  
 Photographers' Association of Central Pennsylvania.  
 Professional Photographers' Association of M. A. S., Section, III.  
 Photographic Society of Philadelphia.  
 Triangle Photographers' Association.  
 Association of Columbia, S. C.  
 Associated Professional Photographers of Memphis Photographers' Club of Eastern Tennessee.  
 Association of San Antonio.  
 The Associated Photographers of Houston.  
 Salt Lake City Photographers' Association.  
 Photographers' Association of Seattle.  
 Monongahela Valley Photographers' Association.  
 Fox River Valley Photographers' Association.  
 Associated Portrait Photographers of Tacoma.  
 Lake Shore Photographers' Association.  
 L'Association Des Photographes de la Valley du St. Maurice.  
 Toronto Photographers' Club.  
 Vancouver Photographers' Association.  
 Milwaukee Association.  
 Albany Photographers' Association.  
 Victoria Photographers' Association.  
 Photographers' Association of Dayton, Ohio.  
 Photographers' Association of Northern California.



*There is one gift  
 that is never  
 duplicated*

WITH all of the money stored in the mint there is ONE GIFT no busy holiday shopper could possibly buy — *your photograph*. It is a *precious* possession that makes a modest demand on your bank balance. To "pose for your picture" is only a matter of moments. But to fashion a worthy photograph is a time-taking art. Arrange your appointment now.



*This emblem is the mark of a member of the National Association of Professional Photographers.*

*Members are entitled to the full benefits of the Association.*

VISIT YOUR FAMILY PHOTOGRAPHER ONLY A YEAR

This is the keynote visual message to the public that was used last month.

ARE YOU HOOKING TO TWO MILLION DOLLARS?



## Master Photo Finishers of America

A. E. Block, President.....27 Von Hillern St., Dorchester, Mass.  
 Fred. Mayer, Vice-President.....Portland, Ore.  
 Wm. J. Meuer, Treasurer.....212 State St., Madison, Wis.  
 Guy A. Bingham, Executive Manager.....Box 1020, Rockford, Ill.

### Territorial Vice-Presidents

South-Western States: W. F. Honnen.....1240 S. Main St., Los Angeles, Calif.  
 North-Western States: C. M. Coffey.....284 N. Commercial, Salem, Ore.  
 Mid-Western States: Chas. W. Lynn.....3917 Orleans Ave., Sioux City, Iowa  
 North-Central States: John H. Seamans.....7052 Jeffery Ave., Chicago, Ill.  
 Central States: E. L. Hurlburt.....315 St. Louis St., Springfield, Mo.  
 South-Central States: J. A. Hammond.....Box 650, Meridian, Miss.  
 South-Eastern States: Elon C. Robison.....105 Third St., N., St. Petersburg, Fla.  
 Great Lakes States: C. P. Phillips.....6930 Gratiot Ave., Detroit, Mich.  
 Dominion of Canada: W. A. Taylor.....274 Carlton St., Winnipeg, Man., Can.  
 Central Coast States: Wm. H. Eichner.....1210 "G" St., N.W., Washington, D.C.  
 New Jersey—New York City: J. G. Taylor.....24 E. 23rd St., New York City  
 New England States: H. K. Atkins.....Middleboro, Mass.  
 Mid-Eastern States: M. J. Koch.....535 Penn Ave., Pittsburgh, Penn.

### Children Keep Cameras Clicking

"Children are the most frequent subjects for snap-shots," advised a local Finisher, when being interviewed today in connection with the big National Camera-Week program of local Master Photo Finishers. Some attempt to obtain interior pictures before the baby is a week old, and from that time on fond parents and enthusiastic grandparents see to it that the baby is made the subject for a roll of film every few weeks.

Next in number are snap-shots of young people singly and in groups, with a generous portion of the boy friend or girl friend. Often a large percentage of these are "stunt" pictures. Odd and foolish posing designed just to get a laugh. Many young camerists simply have to snap a roll of film every time they get into a new outfit—just to satisfy a certain sense of vanity.

Vacation pictures form a very large percentage of all snap-shots taken in June, July and August. Practically everyone takes his camera along on week-end outings and the summer vacation. Which means that there are about four times as many pictures handled by Finishers during the summer season as in January. Every year the number of camera owners seems to increase and with the modern cameras it is quite possible to obtain good pictures under light conditions which were impossible with old cameras having slower lenses.

National Camera-Week is sponsored by the Master Photo Finishers of America, a group specializing in developing and printing, and takes the form of many attractive photo window displays to be seen

all over the city this week, just to mark the opening of the summer season and remind you of the pleasure and value of making a picture-record of your summer vacation activities.

### Millions of Snap-Shots Taken Each Year

"Few people realize the vast number of photographic operators and amount of modern equipment necessary to develop and print the millions of roll films exposed by camerists each year," remarked a local Master Photo Finisher when interviewed today regarding the National Camera-Week program of local Finishers. No longer is commercial developing and printing of the amateur's exposed film handled with three trays and a sink. Modern electrically operated automatic film developing machines are fast coming into use over the country and practically every Finisher is equipped with semi-automatic printing, fixing, washing and drying appliances. This equipment, in connection with new and modern methods of handling, not only insures more consistent delivery of finished prints as promised, but assures the best possible results from exposures made.

In recent years the business of developing and printing amateur film has become a big industry. Starting some twenty years ago when the simplification of the hand camera found the general public taking up picture-taking as a pastime, we now find a camera in practically every other home in the country, and the number of pictures taken increasing from ten to fifteen per cent each year. Years ago many enjoyed developing and printing their own film as a hobby, but in recent years practically everyone depends upon commercial Photo



## CAMERA CRAFT

Finishers for this service. National Camera-Week is being supported locally with numerous and attractive displays of snap-shots and enlargements in windows of dealers giving photo service—simply to remind all that the season for most advantageous use of the camera is just ahead.

### A Thousand Words

An old Chinese proverb suggests that "A picture equals a thousand words," or was it ten thousand. When you are trying to tell a friend of the wonders of the new baby at your house or the many fish you caught over the week-end, a snap-shot is often worth more than ten thousand words. Which suggests that a few extra snap-shots tucked in personal correspondence now and then might take the place of many pages in private letters which are so hard to write these days.

The Master Photo Finishers of our city are trying to get this appreciated message boldly across to us through the many window displays of human interest snap-shots and enlargements placed all over town during this—National Camera-Week. There is something about these personal pictures taken with our own cameras which gives them special interest and value. Possibly it is because they are so very personal. Familiar faces taken in familiar places where there is little artificial posing, and generally in connection with some pleasant incident means that the pictures obtained, while not always art in photography, yet are better likenesses and mean more to us than the finest of portraits.

### Vacation Snap-Shots

What is a vacation without a camera? Your speedometer may show how FAR you go, but a camera along will enable you to show WHERE you go. To prove most of your fish stories. To bring back something of the spirit and pleasure of your vacation period and so help spread the fun over the rest of the hard-working year. Luckily,

someone in most every vacation party has a camera. Some few object to stopping the fun long enough to catch it with a camera, but usually these are the most anxious to see the results when finished.

These reflections are brought to mind by the special National Camera-Week window displays of snap-shots and enlargements which are being shown all over town (the city) by retail outlets served by members of the Master Photo Finishers' Association. These Master Finishers want us to take more snap-shots so they can make more profit, but we'll forgive them that ulterior motive in exchange for reminding us of what can be added to summer pleasures if we will only remember to take a camera and stop now and then to take a few snap-shots as we go. By all means take a camera with you this year. The whole world OUT THERE is yours for the taking.

### "Remember the Day With Snap-Shots"

Childhood pictures are priceless when kiddies grow up. Of this we are easily reminded if we stop to study any of the special photo window displays which the Master Photo Finishers of the city are showing during this—National Camera-Week. While the change from babyhood to maturity is replete with happenings which should impress themselves definitely upon us and the progress marked quite as strongly into periods of babyhood, childhood, the school age—then high school and college, yet the transition is occurring so gradually each day that our memories, unless we have something concrete to remind us, often fails to hold much of a mental picture of children as they used to be. Luckily, children never grow old in snap-shots. If you are not keeping a picture-record of the kiddies, your friends, the family and the pleasures of the home and vacation, plan to start one at once and be able to have today's pleasures—tomorrow. Anytime.

*"Remember the Day  
With Snap-Shots"*



## Pacific International Photographers' Association

Embracing Alaska, Alberta, Arizona, British Columbia, California, Hawaiian Is., Idaho, Montana, Nevada, Oregon, Utah, Washington.

President: George W. Derbfus.....129 Twelfth St., Oakland, Calif.  
Vice President: Ralph Young.....419 Sutter St., San Francisco, Calif.  
Secretary: Claude F. Palmer.....215 Sweetland Bldg., Portland, Ore.  
Treasurer: S. Walters.....Bushnell Studio, Seattle, Wash.

### A Camera Craft Report of the Portland Convention

The Northwest never does things by halves. Their hospitality and wholeheartedness seems to need no external encouragement. Crowds are not essential to the functioning of their enthusiasm. The fourth annual convention was not what might be called a largely-attended affair, yet it was so genuinely cordial in atmosphere, so real in accomplishment, and so profitable in sales to the exhibitors that dealers are united in saying it was a fine convention, and the members left with a good taste in the mouth, if I may indulge in that figure of speech.

The program was somewhat shot to pieces through the inability of George Harris and J. H. Mott to attend, and the absence through illness of Ralph Young. J. Anthony Bill and Harry Elton were a host in themselves, however, and did noble work in filling the gaps. The absent ones were missed and many expressions of sympathy and regret were voiced. L. C. Vinson brought a pregnant message from the National and delivered it with convincing straightforwardness.

President Ball and his administration went out in a blaze of glory, and the new officers were selected with a perspicacity which gives confidence in the incoming forces. The next convention is to be in San Francisco, and President Derbfus and Vice-President Ralph Young are on that spot to help direct the destinies of our next foregathering. Need more be said?

The convention opened on schedule, Tuesday, August 28th. The booths were all in order and presented an attractive front. What they lacked in number was made up in attractiveness and completeness. We have said the attendance was not large, but, remarkable to say, those who did attend came on time and stayed for the lectures and demonstrations, so that it looked, as indeed it was, a worthwhile affair.

On the opening day, J. Anthony Bill gave such a show as only he can stage. It was interesting and instructive. Bill is a past-master in psychological control, and he showed how to make your picture before taking it.

In the evening Edris Morrison and her entertainers made the general public happy with a varied and excellent program. Mrs. Morrison is an active member and is best known from her connection with the Morrison Studios of Portland, but her histrionic talents were new to the visitors.

The writer broadcast over KOIN on the "Broad Field of Photography."

Wednesday's session was opened by an address by National Secretary L. C. Vinson, on the subject of "The Value of Organization." Mr. Vinson, as has been said, has a pleasant personality and a convincing sincerity which carried his message logically to the desired deductions.

The writer spoke on the "Need of a Strong All-Coast Organization," and stressed the human side of such bodies, the sentimental aspect of men of a calling getting and holding together. He insisted that material good came from a persistent application of moral and ethical examples.

W. B. D. Dodson, Secretary of the Portland Chamber of Commerce, followed with a rebuttal scoring the emotional and sentimental viewpoints of the previous speaker and insisted on the vital need of hard and fast rules and material profits from membership in any organization.

A president's dinner, a musical concert, and criticisms of the prints hung filled the evening for the guests.

Thursday featured Harry Elton with a commercial demonstration and lecture on "Color Separation and Panchromatic Emulsions." Harry is so full of his subject that he fairly bulges with it, and he has the happy faculty of imparting what he knows in simple language and logical se-

quence. We have never heard a subject better covered nor gained half as much from any book on the matters with which he dealt.

The report of the Resolutions Committee and vote on measures proposed filled the afternoon. It was an exciting close to the business session, and debate was productive of really definite action.

In the evening the banquet was held in the Multnomah Hotel and every seat was filled, if not at the beginning, certainly after a few of the delectable courses. The writer was master of ceremonies and hopes he kept the affair in motion to the satisfaction of all present.

The new officers are as follows: President, George W. Derbfus of Oakland, Calif.; vice-president, Ralph Young, of San Francisco; secretary, Claude F. Palmer, of Portland, Oregon; treasurer, S. Walters, Seattle, Washington.

The details have been lightly touched upon since amplification should only become irksome and could not hope to visualize to the absent what really happened or how it affected the audiences. In retrospect we feel everyone who came was glad to be there and went home satisfied that to have stayed away would have entailed a loss. The aftermath is pleasant. It was a good convention. It paved the way and created the mood which shall help the San Francisco contingent to pull off a great affair in their turn and get a real crowd when the time comes.

Portland, we looked forward to coming, we left with regret and we look back on your efforts with the kindest, warmest emotions of appreciation and gratitude. Come to San Francisco in 1929 and let us show you how cordially we feel our friendship for our northern fellow members, and make you glad we are still one united P. I. P. A.



Ye Editor Retaileth Newes of Ye Profession and in Quaint Italics Titillateth Ye Sphynx with Hys Quill

## Kathleen Dongan New Studio

It seems but yesterday that Katie began on her own and gratified us all by telling us she was in the profession independently and by herself. Then came her first studio with some makeshifts and many original ideas. And now she informs us by way of a most artistic invitation that her new studio in Thornberg Village, at the north-west corner of the University of California Campus, is ready for inspection, and we are bidden to an exhibition of her most recent prints. Progress was never more deserved, success never so fully earned. All her friends rejoice. May continued good fortune wait upon her efforts.

## East Bay Photographers' Club

Its full title is The East Bay Commercial Photographers' Club, but it takes in portraitists and finishers with a broad inclusiveness and welcome. The group is earnest, aggressive, enterprising and is accomplishing much. The latest achievement is the issue of a sales booklet which promises to make more business for the membership. The election of one of its prominent members, George Derbfus, to the presidency of the Pacific International Photographers' Association is another feather in the cap of the East Bay contingent, and one of which we confess being proud.



**Photographers of Northern California**

The September meeting was a hum-dinger. L. C. Vinson, General Secretary of the National, was present, and the members turned out in force to greet him and hear what he had to offer in news, explanations of the campaign, and in general. They were not disappointed. After a chatty talk by that charming artist, J. Anthony Bill, of Cincinnati, which was devoted to pure good-fellowship and kindly feeling for his brother photographers, Mr. Vinson told the gathering what the National Advertising Campaign had accomplished, was accomplishing, and planned for the future. He showed the books issued for the education of the profession whereby they might learn how to reach out for a share of the created prosperity and what to do with it when gotten. His words were expressed, as always, with simple sincerity, and he left a most wholesome impression that the affairs of the larger body were in good hands.

George W. Derbfus, President of the P. I. P. A., spoke briefly of what had transpired at the Portland convention, touched upon the fact that the next gathering is to be in San Francisco, and asked for the co-operation of every member toward making the 1929 convention worthy of California and the Bay Cities.

The Clift Hotel knows how to serve only one quality of fare—the best—and thus made it indeed a feast for the inner man in body and mind. San Francisco and Oakland were well represented, but for some reason Alameda was conspicuous by its absence. Mabel and Wanda will have to offer some valid and acceptable alibis at the next meeting.

That next meeting will be a milestone in our history, for it will feature the consummation of the radio broadcast, roto-gravure section in the Sunday paper, and exhibition of members' prints. This is big-time stuff, brothers and sisters, and you will not only add to the respect and prestige of your profession by a large attendance, but take away with you constructive deductions from what you shall hear and see. Your attendance is respectfully commanded by the potentate of your own best interests. And that is not maybe, as they say below stairs.

With such important things in the making it is needless to say that the meeting will be interesting. If the attendance falls short of one hundred per cent your officers will have cause to be disappointed for all their efforts climax in fruition at this time and those plans are for your benefit. So make your plans and come.

**Harry Fell**

This time, and again, Harry fell for the great Northwest. A convention without Harry Fell would be a reception without a host, a sunless day, a musicless ball. The remarkable thing about the father of conventions is that he seems to be looked for, welcomed, loved, as much by the members of competing firms as by his own forces. And little wonder, when one thinks back and considers that he never is predatory, assertive or aggressive; yet while loyally fulfilling his own duties, finds time to be generally helpful in act and constructive advice.

**East Bay Photographers**

On Tuesday evening, September 18th, the East Bay Commercial Photographers' Club held its regular meeting in the Argyle room of the Hotel Leamington. Mr. Harry Elton of Rochester, N. Y., was the speaker, and his subject was "Color Separation." Those who have had the good fortune to hear Mr. Elton know he is not only a convincing speaker on any subject which he undertakes, but that he brings to a wide experience and study so simple a delivery as to make his points understandable and usable.

The dinner, as might be expected, was fine, the attendance was good, and the members adjourned with a feeling of satisfaction that the Oakland group was stronger than ever, with an even better spirit of fellowship, and a definite plan of action that gave assurance of future strength.

Of all photographic trade organizations, this body best exemplifies our contention that meetings based on fellowship and discouraging controversies endure longest in their effect and lead to more constructive action by interchange of ideas and establishment of co-operation than a mass of restrictive legislation.

## Memphis Photographers

The Associated Professional Photographers of Memphis met in Third Annual Convention in that city, July 2nd and 3rd.

Invited attendance of all photographers in that trade territory yielded a registration of visiting photographers of 50, making a total registration of approximately 100.

A unique feature of this Municipal Convention to which every visiting photographer responded was the furnishing, in advance, of a negative with contact and projection print from which two experts also made contact and projection prints, all of which were grouped and data giving full information as to films, plates, printing paper, lens, and the timing of the projected prints, helped to make each group of pictures a very valuable record, ready for inspection, comparison and criticism at the opening of the meeting.

It was believed that the educational value to be derived from such comparisons and criticisms would be most valuable and such it turned out to be. Criticisms by Mr. A. B. Cornish, of the Eastman Kodak Company, of the work of the three makers of these prints from the same negative, added considerable value to the undertaking, which was pronounced the outstanding feature of the Convention.

Other features of educational value included Airbrush demonstrations by Charles Moore and Thomas Southworth, hand coloring by G. N. Watts of Chattanooga, Tennessee, and hand coloring of porcelain miniatures by Miss Bertha Calvert of Nashville, Tennessee.

One afternoon was devoted, under the leadership of Mr. Cornish, to operating with the arc illuminant. Mr. E. H. Cassaday made demonstrations under the skylight as also did Mr. Charles Moore; and Thomas Southworth made demonstrations of flashlight portraiture, using the repeating device of the Victor Flash Powder manufacturers.

With the exception of a little time devoted to questions and answers, stunts, etc., the entire two days was given over to intensive educational demonstrations, the visitors being unstinted in their approval of the program, mapped and carried out for their especial benefit.

## George W. Derbius

On first acquaintance you might think him a good-natured, harum-scarum boy with the optimistic outlook of inexperience, but don't try to sell him a goldbrick or pay him in wooden dollars. George is a successful business man, who has made good against competition, and in a more or less difficult field, by sheer ability and industry. That his kindness is not overlooked we evidence his recent election as president of the Pacific International Photographers' Association.

## Commercial Photographers of Los Angeles

A very interesting and instructive meeting was held at B. B. Nichols, Inc.

Many very constructive ideas were brought forward, among them being: To invite representatives of various manufactured articles to speak to us from an educational standpoint, such as Mr. Johnson of the Bausch & Lomb, and the various plate manufacturers, also paper. In this way we could get some real first-hand information that would do to work with.

President Mott invited the organization to a party at his cabin in the mountains during September. This would be a real get together for the members. It might be well to hold our next regular monthly meeting at that time, which should be September 20th.

Bill Bailey was absent for the first time in three years. It was decided to fine him for this offense.

Ed. Note: Where was Bill, and what do you do with the fines, brothers?

## Minnesota Convention

The Minnesota Photographers' Association convention will be held on October 2nd, 3rd and 4th, at the Lowry Hotel in St. Paul, Minnesota.

The officers of the association are looking forward to a great meeting, inasmuch as the program committee made arrangements with some of the best talent in the country to demonstrate, including: Miss Emme Gerhardt, Mr. O. C. Conkling, Mr. Chas. Townsend, Mr. Charles Kaufman and others. It will be a treat to watch these people work and, if possible, the association wants every Minnesota photographer in attendance, and photographers from other states will be cordially welcomed.

SALON WEEK  
IS COMING



EVERYPRINT  
A WINNER



# CLUB NOTES

## FORTHCOMING EXHIBITIONS

October 6th to 21st 1928. Paris Salon. Closing date September 1st. Address Secretary Societe Francaise de Photographie, 51 Rue de Clichy, Paris, France.

October 6th to November 4th, 1928. Second Italian Salon. Closing date September 1st. Address Secretary Salon Italiano d'Arte Fotografica Internazionale. Via Carlo Alberto, 24, Torino, Italy.

October 17th to 31st, 1928. Second Stockholm Salon. Closing date September 15th. Ferd. Flodin, 19 Stureplan, Stockholm, Sweden.

October 25th to 31st, 1928. Fourth Zaragoza Salon. Closing date September 25th. Secretary de la Sociedad Fotografica de Zaragoza, calle de la Libertad, 18. Entresuelo, Zaragoza, Spain.

December 25th, 1928, to January 6th, 1929. Second International Salon Iris. Closing date November 15th. M. J. Van Dyck, Secretary, Haanjestlei 129, Antwerp, Belgium.

January 1st to January 31st, 1929. Twelfth International Salon of Photography. Camera Pictorialists of Los Angeles. Closing date December 15th, 1928. 419 Beaux Arts Building, 8th and Beacon Avenue, Los Angeles, California.

January-February, 1929. First International Salon, Austrian Federation of Amateur Photography. Secretary, XVIII, Ferrogasse 34, Vienna, Austria.

January 15th to 27th, 1929. Tenth Buffalo Salon. Closing date November 15th, 1928. E. J. McPhail, Exhibition Director, 529 Elmwood Avenue, Buffalo, N. Y.

### Chicago Camera Club

Perhaps it is summer in Chicago, and this group of friends is vacationing. Certainly we have received no news from the city by the lake, where fresh water salmon is served in the best society as trout. Trout weighing from thirty to forty pounds each! Shades of Isaac Walton! We have a poem here that a member of this or the Fort Dearborn Club wrote and dedicated to the well-beloved and popular fellow member of both clubs. He has signed it most modestly with the initials G. B. L., and it refers to Doctor Max Thorek.

#### ARTIST'S EYES

*My friend has traveled half this planet o'er,  
And profitably spent his days and nights;  
He's taken charming pictures by the score,  
Which rouse my envy, who have seen few sights.*

*"If I could wander over land and sea,  
And shoot at temples, gondolas, giraffes,  
I, too, could find some subjects, fine and free;  
I, too, could take some gorgeous photographs."*

*And then he knocked me wholly off my feet  
By capturing the trophy of the year,  
With just a picture of a dirty street,  
And three or four sad children playing near.*

*One must, it seems, do more than point one's  
box  
Due west and shoot, if one would win a  
prize.  
Some mystic key the solid door unlocks.  
One has to see the world through artist's  
eyes.*

And just before going to press this came in, at last.

Officers, 1928-1929:

Clayton W. Mogg, president.

Frank T. Farrell, vice-president.

James E. Mercer, secretary.

Joseph C. Savage, treasurer.

The Chicago Camera Club "season" opened with a bang on Wednesday last, in newly decorated rooms and with the "new" corps of officers in the saddle, as shown in the enclosed copy of "Exposure."

Especially fine shows have been lined up



for the immediate future—the work of our energetic print committee chairman, John Skara.

We have not been behind either in sending our own worker's prints to the various salons—and having them accepted—as you have probably noted from the various salon catalogs that I assume all reach your desk.

The most important action taken at the meeting Wednesday was the voting to make our annual show in the Art Institute into an international salon. The Art Institute has very gladly accepted our plans and has allotted us additional space, assigning to us May 2 to June 2, 1929, at which time we will have as our neighbor in the Institute, the International Water Color Exhibition. Our plans are to conduct a very high-class salon and with the co-operation of the Art Institute, through whose doors visitors pass at the rate of one hundred thousand per month, we should attract exhibits from the best the world affords.

Last day for receipt of prints has been set at April 2, and blanks will be issued at a very early date, with all particulars.

## Camera Club National Exhibit

The Camera Club of New York is always doing something original, outstanding and constructive. Just now we have in mind the September exhibit of work from the leading Camera Clubs of America. The California Camera Club, the Chicago, Cincinnati, Fort Dearborn, Denver, Omaha, Portage and Seattle Clubs were all invited to send of their best, and the response was generous. Admission was free and the general public was invited, so that the cause of amateur photography received a decided impetus. Good work.

## California Camera Club

Our home club is, as always, doing many things well. The exhibition of the members' work has stimulated a purely photographic interest and brought into notice workers who were too retiring to exploit themselves. Greatly to our regret an invitation to act as one of the judges of the August exhibit came to us while we were in Portland. The heads of the various committees have been chosen from the best and most energetic of the membership, and

it may be accepted as a foregone conclusion that they are functioning nobly. Raymond V. Wilson proved from the first, and continues to prove, that an absolutely disinterested, broad policy can be maintained and beget success. His committees work with tremendous zest and the members find the club a worthy place to spend their leisure hours; yes, and their busy hours, too.

## Los Angeles Camera Club

The following, signed by M. I., is so worthy of attention that we have culled it for you from the August issue of *The Developer*. The Los Angeles Camera Club is forging ahead from an already fine position and perhaps it is because of sentiments like these.

"Winning the Print Interchange Club is simply a matter of having the best pictures. One may ask how simple is that which demands an explanation, which is harder than making good pictures. The L. A. C. C. is something of a mutual congratulation society, but not without reason. Numbered among our members are several of the foremost photographers of America; men who have and can make pictures of unusual worth. However, basking in the sunlight instead of the darkroom safelight will not make prize winning pictures and keep the cup with us."

## Associated Camera Clubs

Mr. G. Y. Tange, 23 Taylor Arcade, Cleveland, O., has been appointed print director for the next Print Interchange, and notices in regard to the Print Interchange have been mailed to all members. While the rules governing the interchange will be clear and explicit, Mr. Tange requests that the clubs which join the interchange make every effort to comply with the request that criticisms be furnished on the backs of the pictures during the next interchange.

Mr. Tange further requests that the clubs place stickers on the backs of the pictures, indicating that they were hung, in place of using a rubber stamp, to which serious objection has been raised, due to the fact that sometimes prints are stamped and piled on top of one another before the ink has had time to dry, with the result that some of the ink offsets on to the print

adjoining and ruins that print. Furthermore, stickers are now used by practically every important salon throughout the world today. Let's be up to date.

In preparing the prints for the next interchange, the clubs are requested to pay special attention to the mounting of the pictures, both artistically and technically. Last year some of the exhibits were shown to very poor advantage, due to poor mounting, and one exhibit was received in which the pictures had been mounted with rubber cement. After the pictures had been hung for a couple of days about half of the pictures were found reposing on the floor, and had to be remounted before the set could be forwarded. Make a special study of the question of mounting for the next interchange, paying particular attention to the size, color and kind of board, the question of cut-out mount, plate sinking, pencil lines, etc., as well as the type of adhesive used and the method of mounting, and do your part to make your set of prints the best mounted set which you have ever sent out.

Suggestion has been made in regard to a Lantern Slide Interchange. A Lantern Slide Interchange was run several years ago, but the same did not prove successful, and it has been decided that a Lantern Slide Interchange would not prove practical. The objections to such an interchange are the lack of sufficient support by our members, the excessive shipping cost due to the weight of the packages, and the amount of breakage due to rough handling en route. If there are any clubs who would like to participate in a lantern slide exchange, we would be pleased to make announcement of the fact in the A. C. C. of A. Bulletin, and such an exchange of slides could be arranged individually between the clubs interested.

## **The Universal Light Meter**

It has been possible to get very efficient meters for still camera work and equally efficient meters for motion picture cameras, but it remained for Camera Craft to offer professionals and amateurs a slide-rule device that with ease and accuracy determines the proper exposure in any latitude, in any month of the year, at any hour, under whatever condition for still

or motion picture work. The Camera Craft Universal Meter is just what its name implies—it is universal in application.

Covering so many factors, there are many numbers printed on the meter, and a first glance has awed the careless first beholder; but five minutes study has so simplified the procedure needed that the time expended in this conscientious study has sufficed for all time. This device is being sold on the merits of its accomplishments. As an investment it pays enormous dividends in material saved, waste eliminated, and opportunities conserved; in many cases these opportunities never return again.

The Camera Craft Universal Meter sells for \$2.00 with substantial cloth envelope and booklet, which in itself is almost a complete treatise on exposure.

## **Cleveland Photographic Society, Inc.**

President Hartman is on vacation. We get a post card from here and there as he moves across the continent. With the head away it is conceivable that the club is resting. But rest with that bunch means only a breathing spell. They are always doing things. Lectures, demonstrations, classes, by the most eminent authorities are being provided, and the progress of the individuals is the best laurel wreath to be given the organization.

## **Austrian Amateur Photographers**

The first International Salon of Pictorial Photography will be held by the Austrian Federation of Amateur Photographers in Vienna, in January and February of next year. When one considers how generously the Austrian artists have complied with every request made of them, and how eminent a place they occupy in pictorial photography, we trust our readers will not permit themselves to be shamed by a lesser liberality and reciprocation. Requests for entry forms should be made in ample time to the Secretary XVIII, Ferrogasse 34, Vienna, Austria.

## **Our Competition**

In the last month the Japanese Camera Club of San Francisco forged ahead of the Chicago Camera Club. The Silver Cup is only two months off, friends. Will some dark horse suddenly appear?

# NOTES & COMMENTS



## Snow White

The only persons who need be told of Snow White are such as have never used it. Those who use it once use it always, and are its best boosters. To the comparatively few who are unfamiliar with this product and its uses we say that it is a really snow white water color which goes on with ease and stays on; that it is used for whitening out, putting in highlights, lettering, and as a white ink. It comes in the handiest sort of porcelain jar in a carton with a pen wiper and a brush. Write J. W. Johnston, New Arts Building, Rochester, N. Y., for particulars and prices or remit for your packet and be pleased.

## Voigtlander Lenses

You all know for what excellence Voigtlander stands. You all know what Willoughby means in integrity and pleasant dealings. Willoughby is selling Voigtlander lenses at popular prices. Get a catalog and price list and depend upon the unqualified guarantee of the firm for satisfaction. A letter to Willoughbys, 110-112 West 32nd Street, New York City, will start a connection which will bring you happiness with every contact.

## The Orion Camera

We are informed that B. Hopfen & Company, 235 Fourth Avenue, New York City, have become sole American agents for the well-known Orion camera, made in Germany. It is claimed that by casting the box in one piece of duraluminum a strength is gained that withstands the heaviest duty. The 10x15 cm. size is especially intended for newspapermen which would seem true enough since the agents state that after being run over by the heaviest motor car it will show no deflection. This is a test that might be put upon a camera, but we should not advise it as an ordinary practice. The Hopfen Company also announce a new set of Steinheil f 2.5 anastigmats to fit Filmo cameras, and invite the reader to write for literature.

## A Notable Competition

The Hotel Drake will be one of the landmarks of San Francisco. It is as beautiful as modern art and architectural science can make it. The management are conducting a photographic competition with a silver trophy cup for the best amateur print, a round trip to Hollywood with three days at the Hollywood-Plaza Hotel and a personally conducted trip through the studios for the advanced amateur, and one hundred dollars in gold for the best advanced pictorialist picture. The closing date is October fifth. This is no attempt to get commercial prints by scheme as the management promises to return all prints not winning an award. Address William Horace Smith, Director of Competition, Hotel Drake, Suite 634, 447 Sutter Street, San Francisco, for entry blank and particulars.

## Mrs. Alice M. Argus

After two years of absence, during which time she was generally and greatly missed, Mrs. Argus is again connected with Herbert Luhn in partnership. The San Francisco Camera Exchange seemed incomplete without this lady's presence and its patrons, no less than her partner welcome her return.

## Bausch & Lomb Anniversary

The seventy-fifth anniversary of this great American institution, founded by German immigrants who came full of hope and ambition and qualified to the means, methods, requirements and ideals of the country in which they planned to succeed, is to be celebrated fittingly in the home plant and wherever a branch of the house exists.

John J. Bausch and Henry Lomb started under the humblest circumstances and were compelled to fight adverse conditions at every turn.



They worked unceasingly, courageously, hopefully. When they finally gained a firm foothold, it gave them an opportunity to carry out their ambition in expanding into wider spheres of activity. Through all this runs a story of great friendship, love of their fellow-men, modesty, and the admiration and loyal support of an increasing number of friends.

The history of the business is inseparably bound up with the history of the optical progress of America, nay, more,—of the world.

### **The War Department and Photography**

At a luncheon given in honor of Secretary of War Davis he seemed to take especial pleasure in accenting what the military training schools were doing for the advancement of photography. He very wisely said that the preparation for defense in case of war was more important than the development of means of aggression, and that more than anything the usefulness to peace-time living, to national business and production of the army of these United States should be known and understood. We were especially interested, naturally, in learning that photography was a constant subject for research and that the department had originated lenses and screens for its own purpose which had proven of inestimable value in other callings. Again we are led to comment on the relation of photography to almost every art, science and trade of modern civilization.

### **Zeiss Auto Accessory**

Contax is a tail lamp traffic signal that conveys its message in unmistakable manner. The red arrow flashes a direction, right or left, signal in bright light, and cuts through pretty severe haze and smoke. There are three models, one of which shines forward and backward and is intended for front of car only. Request of the Carl Zeiss firm at 485 Fifth Avenue, will bring literature and prices.

### **Little Sunny Arc Light**

Leonard Westphalen, of 438 Rush Street, Chicago, Illinois, not only sells Little Sunny Lamps, not only guarantees them unqualifiedly, but takes the pains to see that purchasers get service. To guarantee so excellent a product is virtually without

risk. Little Sunny is trouble proof, being well made, scientifically devised, without springs or moving parts, and self-feeding. Moreover, it is claimed not to flicker or throw sparks and to deliver a light equivalent to 2000 watts on an 8-ampere consumption.

### **Linhof Precision Cameras**

If there is anything in the way of conveniences that these cameras do not embody they have yet to be invented. Well made, with scientific precision for scientifically precise work, equipped for speed and newspaper work, the best of material and workmanship and a Burleigh Brooks guarantee back of them. Address the agent at 136 Liberty Street, New York City, and get your copy of the catalog.

### **Bert De Vault With Agfa-Ansco**

Known to the trade and the profession alike as an able salesman and liked for inherent qualities quite apart and additional to his abilities, Mr. Bert De Vault is in every way happily connected with the Agfa-Ansco Corporation. His field is the entire coast, and in covering so large a territory his scope enables him to prove his efficiency which needless to say he is doing in a manner gratifying to his firm and to himself.

### **A Visit From L. Sibeneck**

Somehow, Defender and Sibeneck are associated in our mind, strongly and inseparably. We never think of one without thinking of the other, and never think of either without wishing friend Sibeneck could call on us oftener. Recently he spent a few minutes with us here in the offices, and we saw him again at the Portland convention. His reports tend to show Defender is in a popular and prosperous condition, as it deserves, and as his efforts toward making it so warrant.

### **Central Camera Company Bargain Book**

The Central Camera Company, of 112 South Wabash Avenue, Chicago, Illinois, has issued a voluminous catalog of bargains, which will repay any reader for the time and pains of writing for a copy. This firm is noted for its unusual offers, and its policy of sharing a good buy with the public is well known. We advise that you put yourself in possession of this book at once.

## **P. Douglas Anderson in University Course**

It is announced that P. Douglas Anderson, the well-known pictorialist and former editor of *Camera Craft*, has been appointed as in charge of the course to be given by the University of California in *Principles and Practice of Photography*. The lessons begin on Tuesday evening, October 9th, from 7 to 8:30, and the entire series will total 15 hours of constructive lessons. Room 201 of the Extension Building, 540 Powell Street, San Francisco, is being fitted and equipped for the purpose, and as Mr. Anderson's ability is well known, a large class may be expected. This is an opportunity for amateurs and professionals to perfect themselves in the art and science and to fill in the gaps that most suffer in a more or less desultory education gotten from practice and daily pursuits.

## **View Post Cards for Profession**

Emil Pinkau & Company, Aktiengesellschaft of Leipsic, Germany, have long occupied a prominent place in the world's supply of post cards in monochrome and colors. They have rather limited their connections to large volume orders, but are now prepared to manufacture from the negatives or prints of the profession, or such amateurs as intend ordering in worth-while lots. As many a dealer as well as photographer finds a good part of his profits to come from local views, this is an opportunity to have original and exclusive picture cards.

## **Agfa-Ansco at Portland Convention**

Coast Manager A. Hofmeister never proved his popularity more than at the Portland convention. Assisted on the receiving line by Messrs. Jenkins and Long, he shook more hands and smiled more smiles than is granted the privilege of any twenty average men. The gentlemen smiled with a sincerity that seemed to denote sales. Memo was not omitted, though it was a professional affair and, pregnant fact, many were sold on the spot.

## **Cine Art Productions**

The amateur movie fan with a projector aching to show professional reels may now rent the best productions of the Christie Comedies and others at their Cine Dealer's shop. The Cine Art Productions, Inc., of

311 Fifth Avenue, New York, invites our readers to send for a complete catalog of short subjects and we opine it will be worth while to do so. Pacific Coast readers may address the home offices at 1442 Beachwood Drive, Hollywood, California, and those in Canada will receive prompter attention from the company offices at 2150 Albert Street, Regina, Sask.

## **Filmo Vignetting Mattes**

We are all familiar with the "shots" shown in professional films where the subject is photographed through mattes (sometimes known as masks) cut in the shape of a heart, keyhole, binoculars, etc. You can get the same effect with the Filmo 70 camera by using the newly developed Filmo vignetting mattes just announced by the Bell & Howell Company.

These mattes come in sets of twelve—six objective mattes and six corresponding units for the viewfinder. The objective mattes are designed to fit into the groove on the front of the Filmo iris vignetter, where the vignetter color filter is ordinarily used. The matched viewfinder mattes slip over the viewfinder objective, making it possible to center the object properly and accurately on the film.

## **A New Bell & Howell Catalog**

The new catalog just issued by Bell & Howell lists the Telephoto and f1.5 Cine-Velostigmat lenses manufactured by the Wollensak Optical Company. This, in a measure, is a recognition of the genuine merit that these popular lenses possess.

The sale of these lenses has grown beyond all expectations since their introduction. They have been giving complete satisfaction to their owners, which bespeaks the quality that the Wollensak Optical Company has been putting into their products for the past thirty years.

## **Goerz Lenses on Victors**

Cine amateurs who contemplate the purchase of a Victor camera partly because of its ultra speed feature, will be interested to know that the C. P. Goerz American Optical Co. is offering this camera, equipped with its Wide Angle Hypar lens and also with a special ultra-speed lens, the Cinegor (Series B) F:1.5. Both these lenses have a particular appeal for the sport lover or the amateur who wants pictures, regardless of circumstances.



### Light and Shade

We have commented before, and shall again from time to time as we are again and again impressed, on the richness of photographic literature. A recent invoice of two books from the Van Nostrand Company justifies the repetition. M. Luckiesch is a physicist in the Nela Research Laboratory of the National Lamp Works of the General Electric Company, and he is in the position to speak authoritatively on his subject. In this book he brings science to the help of the photographer and lends that help toward the technic of art. There are 135 illustrations and 10 tables among the 265 pages of the volume and all are bound most substantially in blue cloth. \$3. D. Van Nostrand and Company, Inc., 8 Warren Street, New York, your dealer, or through Camera Craft.

### Grundlagen der Autotypie

Another one of the Wilhelm Knapp publications, and also in the German language. Up to the standard of the publisher and from the rich knowledge of no less a man than Doctor Eder. There is a satisfying sense of finality to anything Eder says

that gains acceptability from the years in which he has proven his ability and reliability in the field of photographic science. Bound in paper covers at \$6.30 or cloth \$7.80 or the equivalent in American money. "Camera Craft" Book Service will supply you.

### Die Kinematographische Projection

Wilhelm Knapp of Halle (Saale), Germany seems to be one of the undaunted publishers who cannot be intimidated by numbers or size. At least one and sometimes two new books a month come to us from that concern and they are not little things; on the contrary, they are apt to be great, comprehensive, unstinted volumes covering the respective subjects completely. The last to hand is this one on Cine Projection, 404 pages, bound in paper and priced at \$10.80 or its equivalent in money of whatever realm. Dr. H. Joachim is the author and if our commendation reaches his eye in distant Dresden may this assure him of our highest esteem. He has left nothing wanting and anticipated much that remained for his pen to exploit. "Camera Craft" Book Service can supply on order.

## International Photographic Association

5606—Bruce F. May, Milligan Building, c/o The Kucker Studio, Springfield, Missouri. 4x5, 5x7, 8x10. Special. Am manager of a general photograph studio, doing all kinds of photographic work. Portrait, Commercial, Panoramic, Movies, Slides, Autochromes, etc., for anything out of the ordinary. Class 1.

5607—Edgar L. Shryock, 712 South Ave., Wilkesburg, Pittsburgh, Pa. 2½ x 4½, 3¼ x 4¼, 3¼ x 5½ Circus, Scenes, Airplane and general line of events for general subjects. Class 1.

5608—Sydney Davis, P. O. Box 99, Anyox, B. C., Canada, 3¼x5½ and 5x7 views and children, for views. Class 1.

5609—Bourdon P. Sun, 22 Hsiong-nien Hutung, East City, Mashih, Peking, China. 2x3, 2¼x3½, two pictures of flowers and a laughing child, for artistic pictures. Class 1.

5610—Cheung Hak Ching, Customs House, Hankow, Central China. Class 3.

### RENEWALS

5552—Geo. G. Graybill, P. O. Box 215, Manheim, Pennsylvania, 2½x5½ or smaller, rural views and landscapes, for general. Class 1.

5223—Jonathan T. Welsh, 2317 Cortelyou Road, Brooklyn, N. Y. Class 3.



# CAMERA CRAFT



FOR YOUR THANKSGIVING

DR. J. B. PARDOE

SAN FRANCISCO

CALIFORNIA

For Perfect Pictures

# Gevaert

(Call it  Gay-vert)

## ROLL FILM

"Rich in Silver"—"Fits All Cameras"

Ultra-Fast — Orthochromatic — Non-Curling — Non-Halation

Descriptive Catalog on Request—Address Dept. No. 4

**THE GEVAERT COMPANY OF AMERICA, Inc.**  
423-439 WEST 55th ST., NEW YORK CITY

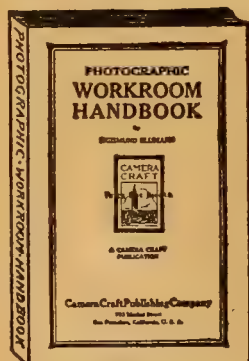
CHICAGO, ILL.  
413-421 N. State St.

PORTLAND, ORE.  
345 Salmon St.

TORONTO, CAN.  
347 Adelaide St., West

Manufacturers of Photographic Products for more than a Third of a Century

THE  
BEST  
TEST  
IS  
A  
TRIAL



The Second Edition

## Photographic Workroom Handbook

By SIGISMUND BLUMANN  
Editor of Camera Craft

IS READY NOW

The first edition in paper covers is exhausted and in accordance with its fixed policy, Camera Craft shares its profits with its friends by putting the surplus into production without increase of price.

This edition is fully corrected, enlarged by several formulae and

**BOUND IN CLOTH AT THE SAME PRICE  
ONE DOLLAR**

At your dealer or from

**CAMERA CRAFT PUBLISHING COMPANY**  
CLAUS SPRECKELS BUILDING  
SAN FRANCISCO, CALIFORNIA







JUI QUON TAI  
*Ralph B. Bonwit*

# CAMERA CRAFT

*A Photographic Monthly*  
»—————«  
SIGISMUND BLUMANN, EDITOR

*Claus Spreckels Building, San Francisco, California*

FOUNDED MAY 1900

---

VOL. XXXV

NOVEMBER, 1928

NO. 11

---

## Carbon Printing by Projection

Part II

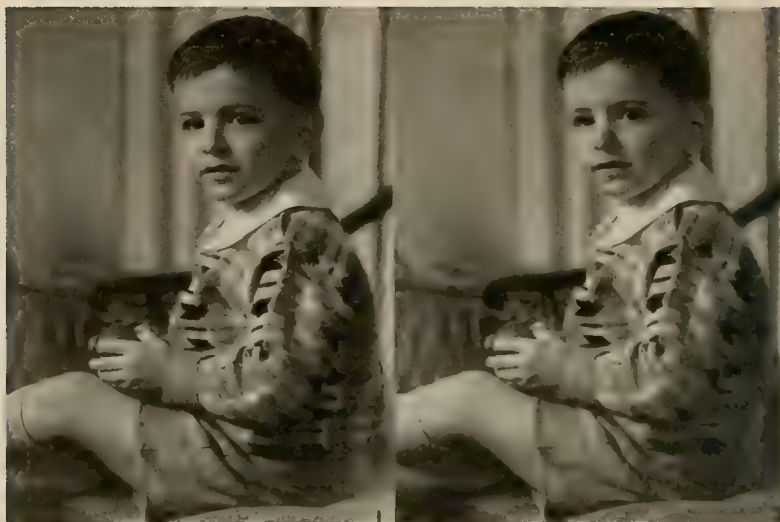
By Thomas Southworth

(Illustrated by the Author.)

(Continued from October Issue)

I am enclosing herewith five little prints of a boy, all of which were made by projection. You will notice, starting with print Number 1, that they progressively acquire softness, yet, I want to assure you, they were made from the same sheet of paper, and developed together for exactly the same length of time. How come? you may say. Starting with Number 1, no diffusant was used between my condensers (9") and the Aristo Arc. Using a 3B Dallmeyer, without stopping, the exposure was one second. (The paper is Vitava C.) Number 2. One sheet of FINE (satin finish) ground glass, treated with glycerine and surplus well rubbed out and removed, was laid against condensers on lamp side. This received two seconds. Number 3. The diffusant was one sheet of common and untreated ground glass, standing in the same position. Exposure, five seconds. Number 4. Likewise with two thicknesses of common ground glass. Exposure, 20 seconds. Number 5. A sheet of flashed opal, bringing about still further softness, brings the exposure time up to 100 seconds. All of which exposures were made with the resistance "IN." Number 6 (not submitted, but identical with Number 5) was made with the resistance "OUT," cuts the exposure time in one-half.

IF photographers could make ALL their negatives a fixed predetermined quality, there would be less need for me to still cling to this, sometimes called, "antiquated" projection apparatus; but, since this is impossible (or should I say, not done), I cannot develop any enthusiasm for laying aside the means such "antiquated" equipment affords me for compensating varying contrasts in my negatives. And, what is more (and here I feel disposed to be dogmatic), neither can any other portrait photographer, familiar with these possibilities, who has pride in his work, and is being paid sufficiently to warrant his best efforts. And (another interposition), the photographer who undertakes to do



ANYTHING at a price that will not permit his best efforts, is a greater enemy to himself than his most unscrupulous competitor.

Then, again, if one has before him a negative of so violent contrast or so thin that he can hardly do anything with it, without resorting to special papers to take care of these extremes, he may follow my one-paper-only practice, by resorting to either one of the three following formulas, or combinations thereof, and get results from his one paper, that otherwise would be out of the question. These formulas are taken from the Printing Room Chart of the Defender Paper Co., with but minor modifications, which apply only to convenience and keeping properties, and which I have had in use for several years.

Before closing this subject (realizing the possibility of its being considered of sufficient importance to publish), let me work in a word or two about lens for projecting.

I believe I have, at one time or another, tried out nearly every form of distinctive type of lens made. In my judgment, the modern anastigmat is the least desirable type for projection work, insofar as making portraits goes. The projected portrait usually carries two pieces of evidence which the photographer instantly recognizes. It is usually degraded in the highlights—a lacking of brilliancy and that fine, clean-cut separation of those snappy facial lights a contact print from the same negative might yield. It looks “grayed down.” The other is “enlarged retouching”! For quite a number of years I endeavored to find a means of overcoming these outstanding objects, for the reason that I insisted on making but one size negatives, but wanted to make all the sizes—within reason—of prints. I feel that the one-man institution—as a matter of economy of both time and material, BUT UNWILLING TO COMPROMISE WITH QUALITY—must standardize his work to the nth degree.





In the making of portrait projection prints, I cannot too strongly urge an impartial comparison of prints made with the two outstanding types of lens—the anastigmat and the Petzval, or portrait type. If you are willing to take my word for it, you will find the latter—owing, I presume, to its fewer reflecting surfaces, and possibly its thinner sections—yields a brilliancy of image that is clearly observable on the screen, even before the print is made, than that of the former. The later print will support this. Now, in order that one may get the maximum degree of brilliancy in the projected print the contact print from the same negative would yield—and the marginal definition is not of much importance—as in the case of the bust or two-thirds figure, by all means, see what the possibilities are **WITH THE FRONT ELEMENT ONLY** of such Petzval type lens. You are then working with a single lens, and if the degree of projection is much, even though the retouching has not been “microscopically” applied, there will be just enough lack of correction in the lens work to yield an exquisite brilliant print, without evidence of retouching—within reason—that one must actually experience himself to fully believe. And the greater the extent of the projection, the less need for inserting even the least degree of diaphragming.

I have before me a 20x24 from 5x7 negative, bust of an elderly man, whose face was well furnished with lines of age and character. The original retouching was not done with any thought of projecting. The negative, as I distinctly recall, is on the strong and contrasty side. Lighting, a little violent. The print I delivered, received not over 10 or 15 minutes’ hand work. Didn’t need it. Data. Flashed opal diffusant. **FRONT ELEMENT ONLY** of 2A Dallmeyer (visual and chemical focus about the same). No stop. Full light strength, i.e., resistance OUT, five minutes’ exposure, Vitava C. Developer, “soft formula” (all metol).

I do not, and shall not, undertake to say what results may be secured even with other makes of similar lens types. I feel that the furnishing of material for the individual with his own stock of lens to work out their possibilities in a manner similar to what I have outlined, is all that can be expected of me, and I am very certain that the photographer, interested in the making of projection portrait prints, will find his efforts and time **WELL INVESTED**, even if he has his own pet diffusing or other stunt for this class of work. The great trouble with all these projecting—diffusing—stunts is you get what you want **AT THE EXPENSE OF BRILLIANCY**. The highlights or shadows, or both, are impaired.

So much for the bust or two-thirds or three-quarters image. But where marginal definition is also important, what then?

Personally, I very much dislike having to make a projection print from a group negative, because I have to compromise with the advantages it took me so long to learn. We all understand the greatest drawback to the Petzval type of lens has been its curvature of field; however, unless the end figures are too close to the margins, I manage to take care of such cases with either my **COMPLETE 2A** or **3B Dallmeyer**, with the **MINIMUM** of stopping down. The reason I give emphasis of sparingly using the diaphragm in this work is my distaste for microscopic sharpness, perhaps more so than my distaste for the other extreme. There is something about lens work that I have to confess I do not understand, when used for projection printing. It would seem that at least some part of a negative, even with the uncorrected lens—the Petzval type—would, on careful focussing, and making allowance for the difference such individual lens might require as between the visual and chemical focus when the illuminant is of the color of the flaming arc, would be as sharp as it is possible to make it, irrespective of the degree one might later stop down his lens; but, to my mind, this does not seem to be the case. This is really an advantage, as it enables one to take care of the “retouching” problem as it affects projection work; but just as soon as one begins this stopping down, the retouching begins to loom up rapidly, and first thing one sees is a sharp, wiry effect with every stroke of the retoucher’s pencil in evidence. This is why I diaphragm so sparingly.

I also have before me an 11x14 print projected from a 5x7 negative, made something like 18 years ago, which I verily believe would defy the detection of the most expert photographer. This is the usual bust, and of my wife. My retoucher, who had a wonderful pair of eyes, evidently felt that she ought to give me a piece of retouching that was truly microscopic, and she did. In the 11x14 print, it appears to be as close as a good retoucher could make it, even on a negative of that size. However, as I recall the making of this projection print, I used an old style common arc lamp with condensers and a common “stock-house” portrait (Petzval) lens, **UNSTOPPED**. This print has **ALL THE BRILLIANCY AND QUALITY** of a contact print. I do not claim that only the **FRONT ELEMENT** of these old style lenses should be used for all portrait projection work. There is really only very little difference, if any, in the brilliancy of image, as between this front element and the complete lens:



it is only where one is trying to camouflage the retouching that the single element really outshines. The latter use calls for about double the exposure necessary for the complete lens, and as there are many times where speed of exposure is quite a factor, it is well to learn the possibilities in each use.

To avoid running this at too great length, and with the view of eliminating unnecessary correspondence, I refer anyone interested in this old method of projection equipment to my story appearing in *Chambers' Bulletin* in the issue of September 21st last. A drawing of the easel, track and other equipment was shown, but how to get it and the name of the track and pulleys was not given. This track is made for barn doors, and known as Aurora Barn Door Track and Pulleys, and procurable through and carried in stock by the larger hardware stores. It is comparatively cheap, and can be self-installed by anyone reasonably adept with saw and hammer and drill. I have since heard from several who have installed this equipment and who are delighted with their results.





The six little prints submitted and description as to how made were so made for my personal chart, so that, knowing the correct exposure under the conditions from any one negative and diffusant, I might change to any other of the various diffusants, to secure greater or lesser contrast, without modification of developer, or developing time, or paper. This modification CAN NOT be secured—without taking on other disadvantages—in any other way or manner of projecting equipment; neither can it be secured by increasing or decreasing one's illumination in contact printing. The latter statement has been challenged but not disproved.

This latitude in securing varying contrasts from a given negative and one kind and grade of paper for all purposes, making all one's prints by projection is an offering that will appeal to one-man institutions, simplifying his purchases, and upholding his confidence and knowledge of the selected one paper with which he is familiar, as well as enabling him, whilst printing, to give all the vent he wants to the various schemes of holding back and accentuating various parts of his negative, and, if he makes his negatives right, he can make ALL his prints by projection, even those to be the same size of the negative, in as little time as is required for making them by contact.

## CAMERA CRAFT

Chart for relative projecting times with various diffusants.

If the correct exposure with naked condensers is, as with print No. 1 ..	1 sec.
With very sparingly treated fine (satin-finish) ground glass, it is.....	2 sec.
With common, untreated, ground glass.....	5 sec.
With common, untreated, ground glass (two thicknesses).....	20 sec.
With flashed opal glass.....	100 sec.

Conditions 3 and 4, approximate contact contrast; 1 and 2 greater, and condition No. 5, less contrast.

For securing greater contrast or softer results than the foregoing scale, still hanging to the idea of using but the one paper for ALL purposes, one must resort to developer modifications. The following may profitably be tried.

### CONTRAST

Elon .....	40 grains
Sulphite .....	4 ounces
Hydroquinone .....	560 grains
Carbonate .....	8 ounces
Salt .....	8 ounces
Bromide .....	280 grains
Water .....	120 ounces

One part above to three parts water, for use.

### NORMAL

Elon .....	270 grains
Sulphite .....	4½ ounces
Hydroquinone .....	270 grains
Carbonate .....	540 grains
Borax .....	3½ ounces and 80 grains
Bromide .....	405 grains
Water .....	240 ounces

Two parts of above, to one of water.

### SOFT

Elon .....	75 grains
Sulphite .....	½ ounce
Carbonate .....	½ ounce
Bromide .....	45 grains
Water .....	10 ounces

One part to three parts of water. This, or its multiples, must be stocked in bottles filled to the cork. Stock in 6 or 8-ounce bottles. This will keep well and may be made up in quantities; but should, of course, be kept in well-stoppered bottles or sealed containers.

**Note**

**The Eber Sensitizing Bath for Extremely Sensitive Tissue**

Water, 100 oz.; Bichromate of Ammonia, 6 oz.; Cupric (copper) Chloride, 88 grains. Use at 65 degrees for two minutes.

Yields very soft prints. The addition of the Cupric Chloride increasing sensitiveness three times.

**WHAT CHERIO !**

**By Sigismund Blumann**

**I**

The sun is shining and the sky is clear,  
My dog is barking just outside the door.  
What cherio! This life is very dear.  
I'll live it all and want and wish for  
more.

**II**

The rose has thorns, and shadows fall  
When shines the sun, 'tis said, but so  
The thorns have roses (don't they?), after  
all,  
And shades are cool. What cherio!

**III**

Life may have troubles, may have cares.  
Much of the choice is ours to make.  
Where e'er the human traveler fares  
The good or bad are his to take.

**IV**

I'll choose the sun. I'll call the dog.  
What cherio! Come to my heel.  
Afield we go, o'er mead and bog,  
By open ways and shady woods. I feel

**V**

Like singing songs and living life.  
Come dog, bark out. Alone we go  
Away from carking care and strife.  
You bark, I sing, What cherio!



# Italian Switzerland

By Prof. Med. Dr. H. D'Arcy Power, F.R.P.S.

(Illustrated by the Author)

I am in Locarno, where the victor, who won nothing, and the victim, who lost much that was not good for him, shook hands over a feast of reason instead of a threat of force. But I did not go to Locarno to think about politics: I simply wanted to see more of the beautiful Italian lakes that I so slightly described in *Camera Craft* some five years ago, and thought of Locarno because Herr Stressemann and M. Briand were lovers of good scenery as well as good dinners, and it might be well to follow in their footsteps.

Locarno, scattered along the shores of Lake Maggiore, consists of some large hotels and pensions, a few goodly public buildings, and many white stone flower-covered houses, with shade trees and seats along the shore and a miniature bathing beach where you can catch mosquitoes after they have caught you. Behind the town the mountains tower up in almost perpendicular cliffs, and across the lake the same. The average tourist seeks his regulated life in one of the large hotels, buys the *New York Times* or the *Daily Mail*, reads them on the shore, and goes on his way thinking he has seen Locarno. It is a beneficent error; it keeps him corralled where he cannot spoil the scenery, or disturb the peace of a different type of man.

Never go anywhere where it says "English spoken here." This really means that "We supply a poor imitation of the already bad English or American cuisine, and charge twice as much as other places." Such is not the place for me; I am twelve hundred feet up the side of the mountain in a little, clean cottage, where a good-tempered landlady supplies an abundance of hot rolls, milk, butter, coffee and preserves. A long, clean room, and a shaded outside porch are mine. On that porch I am now sitting while the sun is setting behind the great peak behind, casting rosy reflections on the opposite mountains; far, far below lies the great lake, winding away into the distance, while



*Granite Houses*



*Brione-Tesson*

*Small Town Houses*

upon its shores, mass on mass, rise the Italian Alps. Steep and sharp against the evening sky, steel blue and violet, snow-crowned above, but below, their feet melt into the shadows of the lake. It is a beautiful picture. Little towns or villages of white stone begin to twinkle with lights, and the bells from the old churches, with their tall campaniles, break into irregular song. The city beneath sends up a confused murmur, and from a house in the deep gorge leading to the sanctuary, a rich voice is singing "*Le Berceuse de Jocelyn*." The evening is warm, but the air is pure and filled with the mingled odor of roses, pinks, and honeysuckles. This Swiss Italy, with a soil fed by mountain streams is richer in flowers than any spot I have seen; not even Pasadena in spring can equal the luxuriance that fills the gardens with color and scent and covers every wall with a brilliant tapestry melting into the carpet of wild flowers on its near side.

The brilliant effect of this flora is enhanced by the nature of the landscape and the dwellings. It is the land of granite, everywhere present, jutting out from the walls of narrow canyons, or, disintegrated, forming the soil at their base. Even when sedimentary rocks are present they have suffered a granite change. And then the houses! Where can you find their like? Cottages that resemble block houses, the blocks of massive granite, roofs of the same material trimmed to resemble slates. There seems to be no woodwork about them, and I have seen a few without windows. If our forefathers who built blockhouses as a defence against Indian attacks had possessed one of these miniature fortresses, a single man could have defied a tribe as long as the provisions lasted, for neither arrows could penetrate nor fire burn.

Flowers and mosses thrive on this granite background and its varied greyness gives unity and relief to their color. But the buildings are not all grey. The Italian loves white, and many are the buildings that get a coating of plaster or stucco that makes a luminous contrast to their somber neighbors. A good example of this effect is shown in the accompanying view of Atrani, that lies at the entrance to the wonderful scenery of the Centivalli, the hundred valleys that run off from the great valley of the Majja. To the lover of the beautiful and the strange, this district is a paradise.

While quite Italian, it is different from the scenery or the life of Italy proper, and from the rest of Switzerland. I met a few American tourists in Locarno itself who hung about the hotels or the lake front or went on the orthodox auto tours, but thereby comes neither profit nor joy. A man needs to take his camera and trust his two feet and his eyes to find his pleasures here. When he is hungry let him look for a decent native inn, enter, and if he knows not enough Italian, point to his mouth and make pretence of eating. A sign language will be promptly established and the result will lead to stomach satisfaction.

This paradise was not attained without paying an entrance fee. Arriving on the first day of the very hot spell under which Central Europe has been sweating, inquiring how to get to my elevated perch, I was told to take the Funicular, or walk.

*A Street Scene**A Quiet Corner*

“How far?”

“Oh! about (vaguely) twenty minutes’ walk.”

Starting on the hike up a narrow, rocky path between forest and granite walls, I was presently overtaken by a sacred procession on the road to the sanctuary of Sasso. I stepped aside to let it pass, and to study the costumes and extremely varied racial types that form the population. They passed on, hundreds and fresh hundreds, with banners, until far above me I could see the path blocked, and far below they swarmed. There was nothing for it but to get in line and move up, endlessly up, the pace slowing with the increasing pressure. That twenty minutes grew to nearly three hours in broiling sunshine, and all the compression that the human body can stand, and then I was not where my dinner was awaiting, but in the sanctuary with six thousand pilgrims blocking every pathway. A kindly priest, to whom I applied, turned me over to a lady in high authority who preceded me through the weltering mass until I was safely free on the road above, and where I arrived a wet, tired, mushy thing, at my new quarters, richer by one more experience.

Next time you go abroad, and are limited in time, cut out some of the lion shows that are boosted in books, and damned on post-cards and take to the byways where there are still things you have not seen, and where, beside pictures you will gather memories that will not die.

## WORLD-BLIND

By James Courtney Challis

*His eager lips upon the scarlet cup  
That pours its dark libations out to youth,  
His eyes cast downward in their search for gain,  
He missed the gold the morning skies held up,  
And failed to see the golden flame of truth  
That lights the straight and narrow way in vain  
For those who are, in life's ephemeral hour,  
Too busy seeking worldly wealth and pow'r—  
Too heedless, pleasure-mad and blind to see  
The golden path of immortality.*



# Photography in Science

By Professor Ingo W. D. Hackh

College of Physicians and Surgeons of San Francisco

(Continued from October Issue)

My father gained experience in portraiture at the Falk Studio of New York, and returned to Stuttgart, Germany, where he began to put the idea into reality. A large camera was built on a solid table resting on rollers. The objective was made by a telescope builder, of about five-inch diameter and four feet focal length. Plates of the required size were not manufactured in those days, and had to be specially made. The studio had a glass roof and one glass wall. Yet the light thus available was not sufficient, and father, always inventive, developed flash-light mixtures of powdered magnesium and asbestos, together with an electric ignition so that by merely pressing the bulb the shutter opened, and the flash went off and the shutter closed. To handle the plates special trays were constructed, and to print from the negatives by sun-light, for gas-light paper was unknown in those days, large printing frames were built. Silver chloride paper was used and toned with gold-solution. All this equipment required a small fortune and the work was time-consuming and expensive.

But the result from a technical standpoint was surprisingly successful. The portraits taken in life-size were living and could be examined with magnifying glass; the hairs could be counted, and the structure of the eye was as realistic as the natural eye. Statesmen, kings and actors came to the studio and were pleased, but paid poorly. Critics lauded the photographs, but told my father in private that he was fifty years ahead of his time. An accidental fire starting in the finishing room and no fire insurance terminated the experiment, causing the loss of the apparatus and the majority of the negatives.

## MACROPHOTOGRAPHY

In mapping the surface of an alloy the experimenter accentuates the details of the surface by using oblique, conical or central illumination; but in mapping counties the photographer cannot move his source of illumination, the sun, and he has to select his proper angles of illumination by varying his position or his time when taking the exposure. Hence there are the two variables: position and time—and should his position be fixed he must vary the time; should the time be limited he must vary the position.

An example of the first type is the photography of the moon's surface during different phases. The position (the earth) is fixed

relative to the moon, but at various times, during the different phases of the moon, there are different angles of illumination and the moon's craters are brought out, the height of the surrounding mountains can be calculated from the length of their shadows. Another example showing the effect of different illuminations at different times of the day from the same position are the two pictures of Kolano Rock and Hetch-Hetchy Lake, one taken in the morning at 5 o'clock, the other in the afternoon at 2 o'clock. Visually the two views do not differ greatly, but photographically the effect is surprisingly different.

Examples of the second type are the aerial views and the photographs taken from the moving airplane or airship. This new field of photography has developed an enormous literature and is of great scientific and practical value. It is used in exploration of unknown regions, in mapping counties and cities, prospecting for deposits and locating prehistoric sites. Monographs have been written on aerial haze, and during the World War the photography with infra-red light, which is not absorbed by haze and slight fog, has been developed and has been extensively used to photograph stretches of land hidden from view by haze. In peace times the impetus given to aerial photography by the necessity of war has not been retarded, and we learn constantly of new applications of this great branch of photography which has become a most useful specialty of human endeavor.

## MEMORY

By James Courtney Challis

*Servant of all humanity am I!  
Awaiting call, deep in the soul I lie.  
In palace and in lowly hut I live;  
I serve both rich and poor, youth and old age,  
And to them all both joy and sorrow give,  
As skillfully their far-flown thoughts I cage  
With gilded bar.*

*I am the crystal bridge that takes you back  
Across the years' interminable track—  
The span that links the present to the past,  
And over which all dreamers love to go.  
I am the golden screen on which are cast  
One moment brief the scenes of long ago,  
Then flashed afar.*

*I am the storing-house for opal haze;  
Wind in the trees along lone countryways;  
The plaintive sound of distant bells at dawn;  
The call of cranes at twilight, and the cry  
Of wild swans from the lake as night comes on,  
Bare branches fingering the autumn sky  
To find a star.*

# Lecture Notes on Photography

By Professor Edwin A. Sperry

Pei Yang University, Tientsin, China

(Continued from October Issue)

## *Shutters*

On exposing a plate it is more than usual that a very small fraction of a second is given to it. In order to make this very short exposure with any degree of accuracy it is necessary to make use of some mechanical appliance. Formerly, when lenses were very slow and the sensitive plate was not as rapid in its action as at the present time, the exposure was made by removing and replacing a cap which covered the front of the lens.

As the application of photography extends its field it became necessary to replace this slow and uncertain method and make it possible to make exposures in as short a time as even  $1/1000$  of a second and that with a considerable degree of accuracy.

If we should undertake to describe all the different devices which have been invented to accomplish this, we would have but little space or time for anything else.

The type first used, probably, was that which consisted of a thin sheet in which an opening was cut, which was so designed as to drop in a pair of guides in front of the lens, the opening passing across the lens, thereby making the exposure.

Next, probably, came the type in which two leaves were used in which openings were cut, and operated to pass across the lens in opposite directions so as to bring the two openings coincident at the axis of the lens. The speed could be better regulated or controlled in this form, but it was cumbersome and uncertain.

Following this, probably, came the type in which the two leaves, as described, were much smaller and were so arranged as to lie between the two systems of a double lens or immediately in front of a single lens, very close to the diaphragm in either case. Mechanism was applied so that, by the use of a pneumatic plunger working against a spring the speed was fairly well controlled. In this form the leaves usually moved in an opposite direction until the two openings were coincident and then the motion was reversed, the leaves returning to their original position. The Unicum shutter is an example of this type.

The next type to be brought out was that in which several leaves were used and so designed that each of these operated on an independent axis and would move out and back returning to their original position. One form is that in which the leaves are so formed that at the final position of the leaves at the end of the motion in either direction, the



opening was entirely closed. They would then return to their original position for the next exposure. The principal advantage of this was that, inasmuch as the exposure was made in one movement in one direction, this decreased the probability of any vibration which might occur in the case of reversing the motion at the time of the greatest illumination. In both forms the leaves were so designed that the opening at the beginning and during almost the entire exposure, is in the shape of a star, for which the manufacturers claim a somewhat improved definition. The shutters of this form are now almost universally applied to the ordinary camera.

The speed at which the movements are made can be controlled by a greater or less tension on the actuating spring, this being indicated on a dial. While these speeds are definitely indicated, it is by no means probable that, except in the shutters of the very highest grade, it will be anything but roughly approximate. This is not to be wondered at when we consider the very minute intervals of time during which the exposures are made and that the differences between these various intervals are still more minute. It necessarily requires the most delicate adjustments to meet these conditions and these can hardly be expected in an appliance which must be sold at the very low price which is asked for them.

The ideal shutter would be one which instantaneously opens to its full opening and remains there for the indicated time and then instantaneously closes. This is a mechanical impossibility. Instead of this the action of the shutter can be divided into three stages, (1) the period of time during which it is opening, (2) the time during which it is at its full opening, and (3) the period of time during which it is closing, however short these periods may be. These periods of opening and closing start and stop the exposure under progressively differing conditions of illumination, quite different from that during the complete opening. Taking all these points into consideration, together with the fact that the speed of action in one shutter may be somewhat different from that of another, even one of the same kind, we can only expect to reach an approximate length of exposure and each shutter will have its own individual factors. This is the reason why, having once become familiar with the action of one shutter, we are so apt to find errors in exposures made by shutters with which we are not familiar. In other words, it is almost always the case that we have to learn the action of any shutter before we can be at all sure of our exposures. There are several ways of testing the speeds of shutters, one being that of photographing a black disc which is revolving at a given rate of speed, say 60 R. P. M., on which is placed a white spot. The fractional distance of the revolution of the disc will be shown by the length of the blurred streak caused by the white spot, which can be taken as the fractional part of a second indicating the time of exposure.

Another type of shutter which has been devised, and by which the very shortest exposures are usually made, is what is known as the "focal plane" shutter.

This form, instead of being attached to the lens, is located as near the focal plane, or the plate, as possible. It consists of a curtain attached to a roller at each end which are revolved by the tension of a spring, thereby rolling the curtain from one onto the other. An adjustable slot, or opening, extending the full width, is made in the curtain and as this opening passes across the front of the plate, the exposure is made. There are two adjustments which can be made, one being the width of the opening, the other being the tension of the actuating spring. By bringing the opening in the curtain down to a very narrow slit and increasing the tension of the spring, exposures of 1/1000 of a second can be made. With a wider opening and less tension, exposures of any length can be made.

In this way the entire illumination of the lens is given for the entire time during which the opening is opposite any point on the plate which makes it possible to get such very short exposures.

One point which is somewhat of a disadvantage in the use of this shutter is that the entire surface of the plate is not exposed at exactly the same instant, but is progressively exposed from one side to the other. This leads to a distortion in any very rapidly moving object, owing to the fact that the portion last exposed will have advanced in its position relative to that part which was first exposed, which tends to elongate the object, more or less. With a shutter moving vertically, any object, say for example, a wheel, will appear as an inclined oval. With a shutter moving horizontally in the same direction as that of the object, the wheel will be lengthened horizontally and, if moving opposite to the motion of the object, it will appear as a shortened vertical oval.

This type of shutter is always used in cases where these extremely short exposures are necessary.

### INVITATIONAL SALONS

The plan of eliminating hanging committees, judges, juries and the like, is a good one for occasion and here and there. It offers an opportunity to the pictorialist who has arrived to show his own choice and exploit his own taste. But it cannot be generally adopted without killing initiative on the part of the rising talent. Those not invited and preparing to arrive should be stopped in their careers. When the masters die off or quit, pictorialism might be expected to go with them. There should be none to follow. But this would not be, for new salons should spring up and new men come into prominence.

S. B.

# Camera Work of Moving Pictures For the Amateur and Professional

By Ernest M. Reynolds

(Illustrated by the Author)

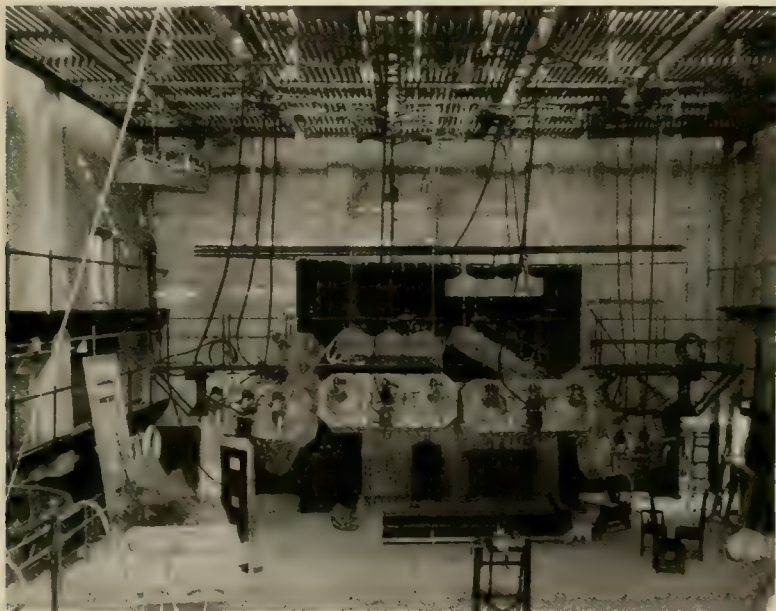
(Continued from October Issue)

## LIGHTING

The subject of lighting the moving picture scene is a vast one, and all that can be attempted here is general information which, if studied persistently, will render a workable knowledge of the art.

First of all, light is the heart of all moving pictures. We can make moving pictures on a cloudy day, but they are not as good as if they were made when the sun was shining. Studio scenes can be made with just two or three portable arc lamps, but in order to present a professional-like job, many arc lamps, such as flood lights, over-headlights, and last but not least, the spot light must be used. This last gives the high lights upon the subjects and is quite essential in present day pictures.

Spot lights are placed so as to throw the light upon the backs of the players. Usually the lamps are upon a platform or bridge-work high above the set and to the back. This type of illumination



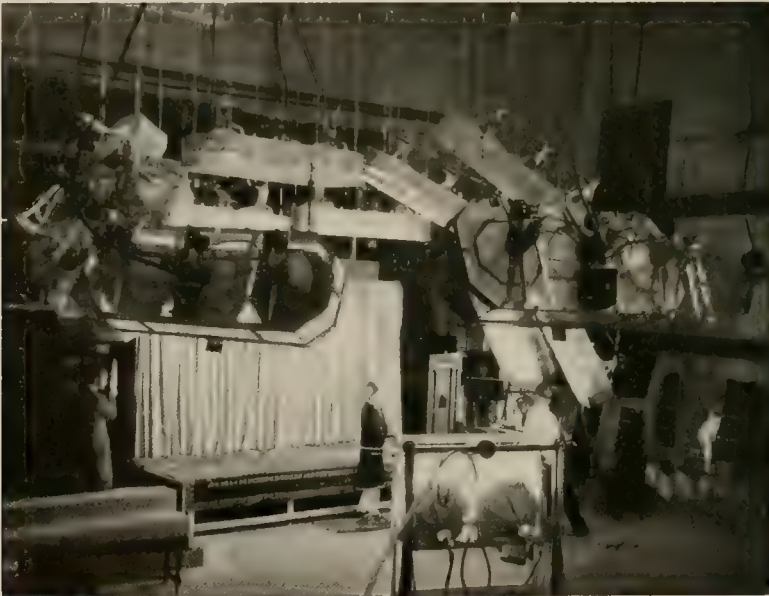
*Motion Picture Studio of the Eastman Kodak Company, using the  
Incandescent Lamp*



is sometimes called back-lighting. A similar lighting effect can also be produced out of doors by placing the camera so as to shoot towards the sun. However, in photographing in this direction care must always be taken to have the lens well shielded from the sun. This is best accomplished by the use of a lens shield, sometimes called a sun-shield. If an iris or mask box is used it will act quite nicely for the shielding effect. Care must be used in making the exposure for the back-lighting effect, as the subjects being photographed do not have the sun on the side towards the camera. Therefore, considerably more exposure can be given the scene. It is just a case of photographing into the shadows rather than upon the sunny side of the scene.

With experience in this type of lighting, very beautiful scenes can be made which would be practically impossible using the direct sunlight. Professional workers use large reflecting surfaces placed close to and under the camera to reflect the sunlight back into the faces of the players. Here again judicious use of these reflectors as to position and direction of reflection means everything to the success of the photography.

These reflecting surfaces are usually made up of some substantial yet light substance, such as a composition board. This is given a coating of aluminum or silver paint. A moderate-size reflector is four by five feet square. Anywhere from two to six of these reflectors are used on one scene.



*The Powerful Lighting Units of the Eastman Kodak Studio in operation.  
Note that the Subject and Environment are Flooded With Light.*

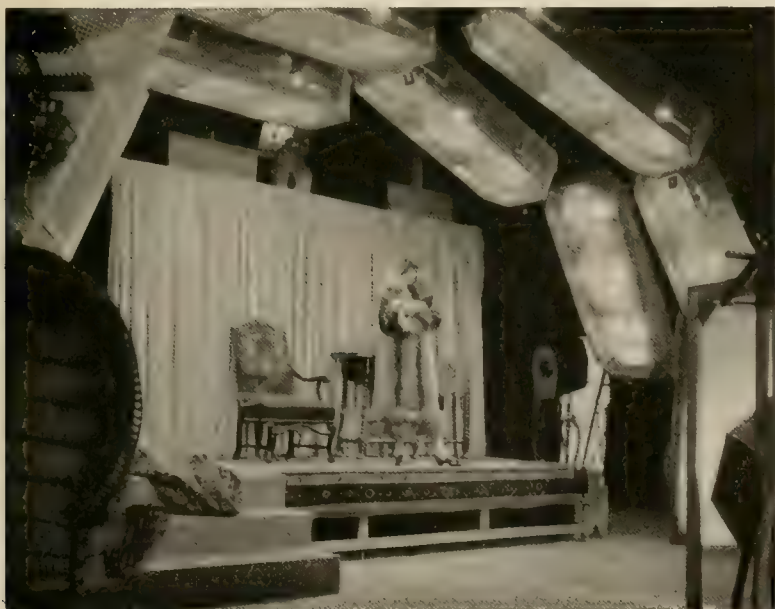
## NARROW GAUGE EQUIPMENT

The narrow gauge camera and projector have been somewhat of a live topic for considerable time. The history of such an application to the motion picture world is quite new, at least in its practical form. It seems that no matter how big an industry might be it is always up to some one company, and usually the largest, to lead the way and the rest all follow.

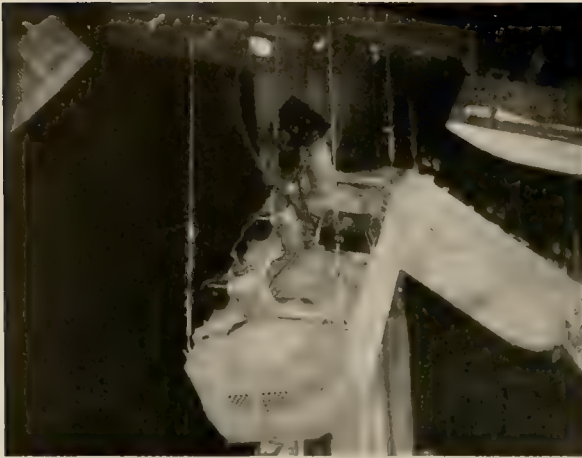
Very little was done with the narrow gauge machine until a large photographic concern placed a complete outfit upon the market at a remarkably low price. The name of the manufacturer virtually confirmed the success of the product as far as the ability to produce satisfactory moving pictures was concerned. It is now being used to quite some extent and steadily growing in favor. The narrow gauge part of this equipment brands it as an amateur machine, but for all ordinary purposes, it fills the bill quite well.

Naturally the owner of this type of apparatus is limited absolutely to the small film. However, many comedies and feature pictures have been printed upon this size film, showing some of the well-known stars. The cost of making your own movies upon this narrow film is considerably less, as the film itself costs much less.

There are, nevertheless, some serious drawbacks to such equipment. One often is advantageously placed so he is able to get a very valuable picture for educational or news work, and if it is made on narrow film it is limited to narrow gauge machines.



*A Color Picture in the Making*



*Close Up of One of the Lighting Units*

There is a way in which the negative may be enlarged upon regular size film, but this is rather expensive and takes considerable time. However, if the scene is really valuable, it can be converted to the standard width film by the use of what is sometimes called a projection or optical printer.

With a little experience, some trick work may be done with these small cameras. Here again the limitations are quite pronounced; but, nevertheless, the same fundamentals are carried out as with the larger and standard type machines. By reviewing some of the tricks described in foregoing pages, several will present themselves as being adaptable to the narrow gauge camera.

A little thought and arrangement prior to the actual taking of your picture is usually very good practice. This is especially so in the case of some event which is scheduled to take place on a certain date. This allows the preparation to be made more complete, such as actual location, time of day, and program of affairs, etc. Such cases as May Day exercises or holiday parades, and field events of all kinds, allow the photographer ample time for ordinary preparations.

First of all, especially in case you are overly anxious to make sure shots, look over your photographic equipment; see that everything is in first-class condition. Bulky apparatus spells doom to obtaining satisfactory pictures of any kind. Next see that you have a goodly supply of fresh film stock. Better have more than you think you will need, for it is the unexpected that is always happening, so be prepared. An example right here may be interesting and will serve to drive home the point.

The author was making a shot of a launching of a large boat on the Great Lakes. The only reason a two hundred foot roll was not



put into the magazine was the call came rather hurriedly and all rolls were of the four hundred foot length. Fortunately, the camera was a four hundred foot type, so into the magazine went a four hundred foot roll. All went fine, the close-ups were made, including many features of modern maritime construction. The bottle was broken on the bow and the boat was on its way to the water. The film footage counter registered one hundred and ninety-two feet as the craft struck the water. The unexpected happened; instead of the boat coming to a normal position in the water it kept on going over in a terrifying list, finally turning completely upon its side. What a shot that made! But try to imagine the feelings of that cameraman if his film had run out at the two hundred mark.

Take a tip, always have plenty of film on hand. The foregoing incident took place while using a standard gauge camera; however, it follows that the same caution applies when using narrow gauge equipment.

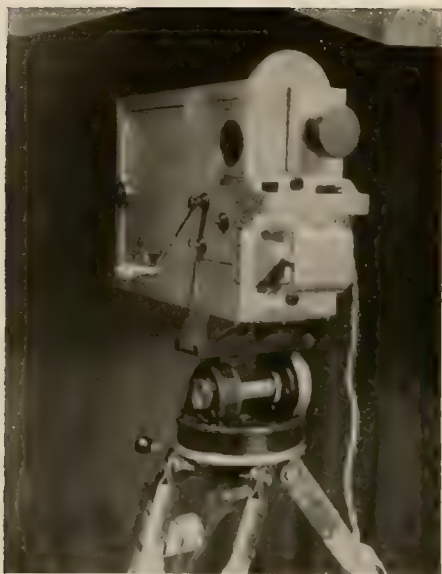
If at all possible, go to the location of your intended movie shots and ascertain about where the sun is going to be at the time you will want to take the pictures. Better yet, if the lighting conditions are not ideal or are in shaded places, make a few test shots, using various exposures. Make these tests from various angles so as to take in the different conditions of the lighting. If important scenes are to be made on location by one of the large production companies, tests are usually made in this manner.

### THE CAMERAMAN AND THE LABORATORY

The subject of laboratory work is, of course, a very large one and requires some chemical knowledge as well as photographic experience. The same chemical changes take place in developing moving picture negative as in developing a roll of snap-shot pictures. In the matter of making the positive: instead of printing upon paper as in the case with snap-shots, the moving picture negative is run in contact with the positive film through a printing mechanism not unlike a camera in its many details. This positive is developed in the same manner as the negative and dried upon large drums in the same way as is the negative. When this positive is dry it is ready to project.

In developing negative a ruby red lamp is used to watch the progress of development, while in processing positive film a brighter red may be used, as this film is much less sensitive to light, approximately eight times slower than negative. However, in the developing of panchromatic negative, that is, film which is sensitive to colors, the use of a red lamp for examination purposes spells disaster. A special light is obtainable for this purpose and should be used with all color sensitive negative.

There have been volumes written upon the various details of



*Professional Type of Color Camera  
designed by Author*

laboratory construction, time and again; therefore, some of this detail will be left out and such space given over to more recent developments of the film game. For the cameraman who hopes to climb the ladder of fame, it is strongly advised that he ally himself with a reputable laboratory and let them do his finishing.

Laboratory work is another branch of the profession, and something to which special attention should be given. Better yet, after one has mastered the camera to a fair extent, try to obtain odd work at odd hours in a film laboratory such as patching film, winding film on developing racks, assisting in compounding of the dif-

ferent baths to be used in the tanks and so on. This will bring you in direct contact with the film finishing game and will do something else for you; it will show you the faults of other cameramen and so will define clearly the stumbling blocks.

However, there is one more thought that might be in order at this time. It is quite common among professional cameramen to make tests of their exposures as they go along, especially when important scenes are in the making.

The following stunt has been tried out and not found wanting:

A small wooden frame is made to hold three test tubes upright. The large size tube is much better to use, if it can be found; usually in a medical supply store. Fill these tubes, one with developer, one with water and the third with hypo. This little outfit can be taken into the darkroom where film is loaded or in any place where complete darkness prevails. When a test of the film is desired take the magazine into the room where this rack is placed, and in the dark, of course, cut off a small bit of film, about the length of test tube, and insert film into the tube which contains the developer. Examine with the darkroom lamp, and when the development is complete place in the water tube for a few seconds and then change film to the hypo tube. When the hypo bath has done its work, drop film into the water and rinse for a few seconds, thus giving the film the entire developing process and giving you an idea of exposures, lighting, focus, etc.

# The Color of Developed Silver Images

(The following original paper by the eminent French investigators, MM. A. and L. Lumiere and A. Seyewetz, which is translated from a recent number of "La Revue Francaise de Photographie," records the results of a systematic investigation of the stain images accompanying developed silver images. It is shown that, apart from glycine, there is none amongst the ordinary organic developing agents which is entirely free from this auxiliary image development by stain formation.)

*It has been our policy to abstain from giving our readers abstracts, reprints, or anything other than exclusive and original text on the reading pages of Camera Craft. Our Professor Dr. H. D'Arcy Power not only covers what is important in the world's progress in his department, "Photographic Digest" but comments on the matters after personal trial and from deep and specialized knowledge. The following, however, is so timely and has so direct a bearing on what photographers are doing, trying to do, want, and variously succeed or fail in achieving, that we print it here, word for word, as we found it in that great and basic authority the British Journal of Photography, issue of March 23rd, 1928.* S. B.

The silver reduced by photographic developers customarily employed in the making of negatives, or positives on glass or paper, normally gives an image of black tone; but, according to the conditions of working, this tone may vary appreciably and may assume a brown or blue-greenish tint. This result manifests itself in the case of rapid plates, having a relatively coarse grain. The case is rather different when one uses materials of very fine grain, such as those described as warm-tone plates; with such plates images of yellowish, red or violet colors may be obtained, depending upon the exposure, the dilution of the developer, and the time of development.

If the developing action is carried out with a very dilute solution, the silver particles are of an extreme fineness. At first the image appears in a yellow-gold color; then, these particles growing in size by the progressive deposition of metal upon the elementary grains, this color passes into red, then purple brown, brown black, and finally bluish or greenish black.

The size of the grain alone determines the production of tint, and it does not appear that the constituents of the developer or of the gelatine play any part in the changing color of the image. Thus, whatever may be its color, if this plate is treated with a reagent that removes metallic silver, the image vanishes completely, without leaving any trace in the gelatine coating.

## Color and Secondary Image

On the other hand, it is well known that pyro-developed negatives sometimes display a brownish color which is the more intense the greater the period of development has been and the smaller the proportion of sulphite in the developing solution.

The nature of this coloration is essentially different from the coloration of the image warm-tone plates. It will be noted, in particular, that—

(a) Whatever the time of development and the concentration of the developer, the tint does not vary except in intensity, i. e., if the factors (time and concentration) change, the color remains invariably brownish and does not pass through such phases as yellow, red and violet.

(b) At the same time as the brown color arises, the gelatine coating becomes insoluble at those points at which reduction of the silver haloid has occurred.



(c) When the reduced silver is dissolved away completely, by means of a reducer such as the hypo-ferricyanide mixture, there remains in the gelatine a brown-colored image, which contains no silver compound and is formed by an oxidation product of pyrogallol.

It is the formation of such images which raises most of the problems discussed below. What are the conditions in which these colored images can arise in the case of the pyro developer? What happens in the case of other developers, when the most favorable conditions are applied? And what are the properties of these secondary images?

### Formation of Secondary Images in Pyro Development

This phenomenon appearing to involve an oxidation of the phenolic substance, it seemed to us, *a priori*, that the reagent of most importance is sodium sulphite, the anti-oxidizing properties of which are well known. This has been fully confirmed by experiment.

A series of Lumiere Blue Label plates were exposed for the same time and under conditions identical at all points. These were then developed in developing solutions containing, per litre, 3 gms. of pyro, 10 gms. of anhydrous sodium carbonate and varying amounts of anhydrous sodium sulphite, namely 1, 2, 3, 4, 6, 9, 12, 20 and 50 gms.

We first noticed that, with amounts of sulphite exceeding 9 gms. per litre, the images do not exhibit any yellowish tint, and that the total removal of the silver by the Farmer reducer leaves no trace at all of a photographic impression.

On the other hand, as the proportion of sulphite is reduced more and more, it is found that the color of the image becomes increasingly lighter, until a yellow-orange color is reached with the minimum proportion of sulphite.

The residual image obtained after removal of the silver is very feeble, with the sulphite present to the amount of 6 gms. per litre, but gains in intensity with decreasing amounts of sulphite until it presents its maximum of vigor in a developer containing no more than 2 gms. of anhydrous sodium sulphite per litre.

Similarly, the proportions of the alkali carbonate were varied, and this constituent itself replaced by caustic alkalies, without giving rise to any very notable difference in the results. It is therefore definitely the proportion of sodium sulphite which plays the essential role in the control of the secondary image.

### Influence of the Developer Proper

The same experiments were repeated with pyrocatechin, hydroquinone, chlorhydroquinone, paramidophenol and its methylated derivative, metoquinone, diamidophenol, paraphenylene diamine and glycine. The results of these tests are set forth in the accompanying table.

It will be seen that the proportion of sodium sulphite needed to inhibit the formation of the colored secondary image differs greatly according to the nature of the developing agent.

It has already been established that there is a constant relation between the insolubilisation of the gelatin and the diminution in the sulphite content; this parallelism extends equally to the formation of the colored secondary image.

## CAMERA CRAFT

In the case of all these developers, when the sodium carbonate is replaced by caustic soda, the reduction is merely accelerated, without otherwise changing the phenomenon of the production of the secondary image. However, in the case of pyrocatechin alone, this image is black in the case of sodium carbonate and yellow-brown with caustic soda.

Developer	Colour of Residual Image	Apparent Relative Opacities of the Residual Image.	A.
Pyrogallol	Orange yellow	10	11
Pyrocatechin	Black	10	6
Hydroquinone	Yellow brown	10	2
Aduro	Yellow brown	10	2
Diamidophenol	Reddish brown	8	2
Metol-hydroquinone	Yellow brown	6	2
Metoquinone	Yellowish brown	5	2
Paramidophenol	Black brown	3	2
Metol	Black brown	2	1
Paraphenylenediamine	Black	1	Without appreciable influence
Glycin	None	0	

In the table, the figures given in the column marked A are the quantities of anhydrous soda sulphite (grams per litre) required to prevent the formation of the secondary image.

### Secondary Images Not Containing Silver

From the photographic point of view the experiments relating to the secondary image appear to us to bear principally upon two points; the physical constitution of these images and their grain and chemical properties.

It seemed that perhaps the normal grain of a photographic image might not exist in the secondary images which take their origin in the oxidation of the developer around the particles of reduced silver. Microscopic examination has confirmed this suggestion.

The absence of grain might give rise to the hope that these images would provide a method of extending photographic enlargement to greater limits. Unfortunately, though grain no longer exists, irregularities occur in these oxidizing reactions producing a discontinuity which, though imperceptible to the naked eye, is revealed by the microscope or in an enlargement. All endeavors to avoid these irregularities, by agitation or dilution, have hitherto failed.

If the residual image cannot be very greatly enlarged, on account of this discontinuity, it does, however, exhibit interesting properties in its chemical reactions.

The oxidation of developers generally entails the production of quinonic compounds having the power of insolubilizing gelatine and possessing furthermore the property of fixing basic dyes. They are a kind of mordant for these dyes by means of which secondary images may easily be intensified; particularly by means of the mixture of methylene blue, rhodamine and thioflavine which we have previously advocated for dye intensification.

### Conclusions

1. The color differences which are exhibited by images developed with developers which insolubilize the gelatine are due to the formation of a secondary image, free from silver, which is superimposed upon that arising from the reduction of silver during development and modifies its color.

2. This secondary image is probably formed by a quinonic compound arising from the oxidation of the developer.

3. The color of this image varies with the nature of the developer and occasionally with that of the alkali used.

4. Its intensity, which also depends, to a certain degree, upon the nature of the developing agent, is determined essentially by the content of sodium sulphite. This intensity diminishes as the proportion of sulphite is increased.

5. With pyrogallol the proportion of sulphite above which the secondary image fails to appear is 10 per cent, whereas it is only 2 per cent with other developers.

6. Glycin is the only developing agent which does not give this oxidized image, whatever may be the content of sulphite.

7. The layer of gelatine in which the oxidation product is formed is rendered more or less completely insoluble, and the degree agrees with the intensity of the image.

8. The secondary image is a mordant for basic dyes and may be intensified by fixation of these dyes, to such a degree that they become equal, or even superior, in density to the original silver image.

## Pari Passu

By Sigismund Blumann

(Illustrated by Philip Newberg)



*My littlest girl stands at my knee,  
Looks in my mock-stern face to see  
If all the anger which I seem to feel  
At her small naughtiness, is real.*

*Half dried, the tears still stain her cheek  
That anger shed ere she was meek.  
The pout yet swells her little lips  
As to my neck her warm hand slips.*

*"Oh daddy! When oo was a little boy  
Did ever oo break up a toy?  
And did oo's daddy be so cross  
At such a teeny, weeny loss?"*

*Dear little one, could I but tell  
How that my crossness means so well,  
And could I only understand  
God's mercy in His heavy hand.*





FIRST AWARD  
ADVANCED CLASS  
*K. Takahashi*

# CAMERA CRAFT



*Advanced*



SECOND: *Ned Hungerford*  
FOURTH: *Dr. Max Thorek*

THIRD: *N. Noguchi*  
FIFTH: *W. A. Watson*

## ADVANCED COMPETITION

November, 1928

Dr. P. B. Atwood  
Miss K. Berger  
Karl Burgersdorfer  
A. F. Couchon  
Dr. P. Elfridge  
Ig. L. Emanuel  
Clarence Feltmann  
Alexander Fetz  
H. Y. Hara  
Ned Hungerford  
Z. Isobe

Matt. Iverson  
H. Jenkins  
H. S. Kaito  
T. Kawaguchi  
Dr. Maximilian Kern  
S. Kira  
K. Kojimoto  
Miss Alma R. Lavenson  
F. LeFevre  
J. Z. Murakami  
T. Noguchi

M. A. Obremski  
Dr. B. J. Ochsner  
A. Pfennigbauer  
Frank Lee Rogers  
H. Samuelson  
Mrs. P. M. Sutton  
K. Takahashi  
Dr. Max Thorek  
T. Uyeke  
W. A. Watson

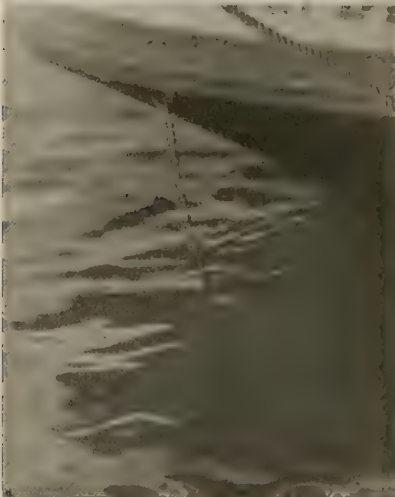


FIRST AWARD  
AMATEUR CLASS  
*Edward Alenius*





*Amateur*



SECOND: *T. K. Tsukane*  
FOURTH: *W. C. Vestal*

THIRD: *Mrs. W. F. Eldridge*  
FIFTH: *F. L. Owen*

## AMATEUR COMPETITION

November, 1928

Edward Alenius  
Ramos Avel  
John I. Berker  
Dr. F. W. Burcky  
Marcial Caceres  
Raymond W. Chapman  
C. C. Chaw  
Chin Chang Chung  
O. W. Conrath  
Robert Dallman  
J. B. Deasy  
Mrs. W. F. Eldridge  
Elbert Fink

Dr. Frederick Fowler  
Lock Shing Hing  
M. F. Holman  
M. F. Hotchkiss  
Miss J. Inman  
A. J. Iverson  
Harry K. Jones  
C. E. Lamphere  
C. J. Lim  
Rene London  
Dr. L. S. Mace  
K. Matsuki  
I. G. Menchik  
Mrs. Corrine Meyer

William Narahara  
I. R. F. Nevremont  
Joseph Newman  
F. L. Owne  
Dr. L. Patterson  
Robert E. Pike  
W. R. Rodgers  
O. S. Simonson  
Bourdon P. Sun  
Thomas L. Thienes  
T. K. Tsukane  
William C. Vestal  
A. Weschler



## PHOTOGRAPHY: WHENCE AND WHITHER

How photography, as we know it, came into existence we know variously according to our reading and understanding. Be we French, all of it centers about Niepce and Daguerre. If British, Fox Talbot is our accepted progenitor of modern photography, without whose discoveries and improvements it should have died in the iodine-silver plate period. Americans are apt to consider Hannibal Goodwin and George Eastman as the heroes in the epic of popular camera use. Whichever the present reader's conception he is more than half right.

We, of this generation, are living in momentous times. I have seen the telephone, the incandescent light, the automobile, the aeroplane, and the radio come into existence. And, dear friend, I am still this side of sixty. In photography, motion pictures have arrived as a miracle, and the other day it was my privilege to see a black and white reel thrown on the screen in the colors of Nature. I almost said in colors more beautiful than natural colors.

Fifty years ago a photographer needed a pack mule to transport his equipment or he had the choice of being his own pack mule. His plates were coated in the field under a suffocating tent or muffler, and developed on the spot under the same deadly light protection. It was a sloppy job. Wet collodion and nitrate of silver solutions are not proper in neat society.

Today one may put a camera in the side pocket of an ordinary coat, yes, in the vest pocket, load it in daylight within a minute, and carry a reserve of films sufficient for a hundred exposures in the other pockets.

Ten years ago motion pictures were the product of highly developed skill and their cost was terrific. A motion picture camera and its appurtenances might be packed in a trunk if the trunk were large enough. Today a motion picture outfit, including the projector, can be put into a modest handbag.

As this is being written your shop is prepared to sell you a screen and a special panchromatic reel of film that will enable you to load in daylight, and later project in natural colors what you have taken. The screen will add a fraction of a pound to the weight of your outfit, that is all. The cost of the screen added to the original cost of your camera will make the whole cost less than half of what the camera alone should have cost you a few years ago.

Photography is borrowing from and depending upon quite every science and several of the arts. It is paying its debt with interest in being almost indispensable in most of the sciences and many of the arts. It takes from each the known laws and returns finished products, or aids in the discovery of new laws and principles.

Children are taking pictures—yes, and successfully. Industries of tremendous size and importance have been built about and are dependent upon photography, and they are growing to greater magnitude year by year. The time is ripe, it has been ripe for years, to incorporate photography as an accredited unit in the curriculum of high schools and colleges. It is being taught in a more or less desultory way now in some places.

Photography: Whence? We know or can learn from books. Whither? Who can say? When we know the ultimate limit of man's power the question may be answered. Till then we can watch and marvel.

*Remember  
the Sick*



*And Help  
the Needy*



As Christmastide approaches we have been accustomed to seeing National Tuberculosis Association Stamps on sale and, no doubt, most of us have bought them generously. The money is for a noble purpose and we do well in that buying.

It is dreadful to be sick at any time. It is worse to be so at a period when all the world is rejoicing and making holiday. To be incurably afflicted is indeed a tragedy.

Consider then the tubercular men, women and children whose lives are in the present scourged, in the future limited, and whose only hope lies in being able to maintain a cheerful frame of mind, of getting proper and sufficient nourishment, and of living in certain places under prescribed conditions.

How shall the poor keep cheerful with need adding to their physical affliction? How can they get sufficient or proper or any sort of nourishment? How may they go to the right places and exist under conditions which are essentially non-productive and idle?

How, unless we who are well, earning, able to help, do capitalize our blessings and give a tithe of their worth toward the cause!

Christmas time is no better than any part of the year for doing a little of Christ's work but it is conceivably a more appropriate time to remember it. Buy the stamps and buy liberally. Wish yourself a Merry Christmas and feel the afflatus of a good deed well done.

### Thanksgiving

The followers of Scheppenhauer would have you believe that the pleasures of life are less an absolute quantity than an absence of suffering and that we therefore have nothing to be thankful for in that we have a right to expect not to suffer.

For one, I am thankful that Scheppenhauer cannot influence my frame of mind or make me less grateful for the sun and moon and starlight, for my faculties and good health, and most of all for the dear ones and friends who are not merely a negative quantity of something undesirable; but a very real, a very joyful potential of a happy life.

We all have something for which to be thankful. Some of us have much to achieve, much for which to hope; but there is a pleasure in anticipation and Pandora was blest with something pretty big when hope remained in the box.

Epictetus was happy with very little. Diogenes with his lantern sought for an honest man and went cheerfully about the job in coarse cassock, and not overmuch to eat. Edison is happy with eighteen hours work per day. You and I, and we kept books on our blessings, might find much on the right side of the ledger which warrants our taking occasion this month to bless the Lord.

Thanksgiving Day is our opportunity to realize how really well-off we are. Personally, as a family, as a nation, as a race, we are indebted to Providence for much. Let us refuse to carp and open our hearts to sunshine.

And may each year bring you, not only more for which to be thankful, but a keener consciousness of the happiness of living.





### How Color Filters Improve Pictures

In your photographic experience, still or motion picture, you have no doubt noticed that colors, when recorded on film in the ordinary way, do not have the black and white values which they present to the human eye. Red is reproduced very dark or black, orange and yellow appear dark grey, while a beautiful, delicately shaded blue sky appears on the print as a glaring white area. The result is disappointing unless one is unfortunate enough to have become so accustomed to seeing such photographic reproductions that through habit the values seem correct and satisfactory.

The reason for the failure of film to give true monochrome values to all colors is that ordinary film is affected very quickly by certain light rays and far more slowly by others. The exposure is calculated for the total volume of light and hence the slower acting rays are not allowed sufficient time to register their color values on the film emulsion.

The blue rays are the ones which do the damage. The red rays, at the other extreme of the spectrum, are the slowest in affecting the emulsion. Hence, if you photograph a blue and red object, say a girl with a dress of those colors, you will get glaring white with little or no detail in the blue areas, and heavy black where the garment is red—quite an unsatisfactory reproduction.

The remedy is suggested by the foregoing explanation of the cause—to hold back in some way the active blue rays, preventing them from overdoing their work before the red, orange and yellow rays have time to act. Color filters are the means of holding back the blue rays. Made of amber colored glass, they absorb a portion of the blue rays, the amount of absorption depending on the density of the filter.

Absorbing part of the blue rays with a filter reduces materially the effective light

which will reach the film. To offset this, the lens diaphragm is opened up one or two stops, doubling, trebling or quadrupling the exposure in accordance with the density of the filter used. Lengthening the exposure gives the slower red and yellow rays more time to act on the emulsion and the objective is attained—all colors are represented more nearly in their true black and white values.

Now the young lady's blue dress will appear a soft grey with shadows and folds evident to show contour. The red portions will be a darker grey—not heavy black. The blue skies in your scenic shots will be a delicate soft grey rather than glaring white. If clouds were present they would be shown in white or lighter greys. In many cases a well rendered sky makes a picture of what would have been merely a photograph. Foliage and flowers will be rendered more nearly in their correct monochrome values. Practically every scene will be improved by the simple device of screwing a color filter into your lens mount.

A few words about color filters and the details of their use may prove interesting.

A color filter is merely a piece of optically perfect glass of inherent yellow or amber color, mounted for convenience in a short cylinder which is quickly and easily attached to the camera lens.

It was stated before that filters vary in density. Those most commonly used in motion picture work are marked 2x, 3x, or 4x. These symbols indicate the density of the filter, expressed in terms of the number of times it is necessary to increase the normal exposure (exposure without filter as indicated by your meter or exposure chart) when using that filter. The symbols are read "2 times," "3 times," etc. With a "2 times" filter, for instance, you would double the normal exposure. (If normal is F 8, use F 5.6.) A chart is given below for your convenience in knowing

how to modify normal exposure when using a 2x, 3x, or 4x filter.

You will be rewarded in better pictures if you will develop the habit of using filters whenever there is sufficient light. With the F3.5 lens a 2x filter can be used whenever the normal exposure is F4.5 or less, so you can easily use a 2x filter on most of your outdoor shots this summer.

Exposure modifications when using color filters:

Normal Exposure.....	2.7	3.5	4.5	5.6	8.0	11.0	16.0
For 2x Filter.....	1.9	2.5	3.5	4.0	5.6	8.0	11.0
For 3x Filter.....	1.5	2.0	3.0	3.5	4.5	6.3	9.0
For 4x Filter.....	1.8	2.5	2.7	4.0	5.6	8.0	
F3 is half way between 2.5 and 3.5. F9 is half way between 8 and 11.							

The lens diaphragm adjustment is vitally important to successful pictures. Follow your exposure chart, or better yet, use a good exposure meter.—Filmo-Topics.

### What Is a Close-Up?

We read and hear much of close-ups semi-close-ups, long-shots and semi-long-shots. But when it comes to a matter of differentiating between one or the other of these terms, a great many of us are unable to decide just where the lines of demarcation begin—just where, for example, a close-up merges into a semi-close-up or a semi-long-shot into a long-shot, and so on.

In the production of amateur scenarios it is vitally important that both the director and the camera man know and agree as to the difference between these terms. This is especially true in so far as close-ups are concerned, because the close-up, judiciously used, often spells the difference between success and failure. If the amateur's script calls for a close-up, he should make a close-up, not a semi-close-up. By the same token, he should make a semi-close-up when the script calls for one—not a close-up.

But what is this difference? How can the amateur tell? Where is the "line of demarcation"? We'll try to tell you here, in the hope that, in this respect, your future pictures will be just a little bit better.

A close-up of a person shows only the head and shoulders. Hands or inanimate objects are often shown to emphasize a certain point. The nature of the action in such a case will largely determine the distance of the camera from the subject.

When a close-up is taken, it is important to have it in the same setting as any pre-

vious longer shots of the same scene; for, although the other actors will be eliminated in the close-up, a changed background would be apparent. Frequently, even the other actors' arms or the side of a head should show in a close-up of this type.

If the action of the picture calls for the blending of a long-shot or semi-close-up into a close-up, great care must be taken to make the action smooth. For example, the scene shows the heroine in full figure, about to sit down in a chair. She walks to the chair, places a hand on the arm of the chair and sits down. If she is to be then shown in close-up, greater continuity is possible if the scene opens just as she has sat down and as she leans gently back in the chair.

A semi-close-up shows about three-quarters of the average human figure—that is, the actor is "cut off" at the knees.

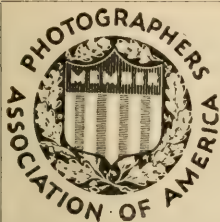
A semi-long-shot shows the figure at full length and may, if necessary, include a group of figures.

Long-shots are those in which the field of the camera can include any action that takes a great deal of room or which can show persons or things at a distance.

In scenic pictures or other productions where there is but little action, the distance from the camera to the subject varies as regards the definition of close-ups, semi-close-ups, long-shots, etc. For the purposes of the average amateur, however, the foregoing definitions will be found to be quite generally applicable and, in almost every case, very helpful. A few experiments will soon make you an adept. Compare close-up, semi-close-up and semi-long shots. Varying the distance of the camera to the subject produces the effects—Cine-Kodak News.

### When Your Roll Films Are Fuzzy

If you are certain that your lens is clean, that you are focussing with approximate accuracy as to distance, and the evidence is not of motion, then your camera is out-of-focus and should be taken to the repair man. To correct this fault is easy but requires skill and care. Do not trust yourself to do it though nothing more is called for than the loosening of a screw, the moving forward or back of the scale, and the retightening of the screw.



## Association News

JOHN R. SNOW, Mankato, Minnesota, *President*  
CHAS. AYLETT, Toronto, Canada, *1st Vice-president*  
D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*  
GEORGE STAFFORD, Chicago, Illinois, *Treasurer*  
C. W. HOWSON, Minneapolis, Minn., *Chairman Commercial Section*  
PAUL TRUE, New York City, *Chairman Manufacturers Bureau*  
L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*

### Warning!

Investigate before you jump! Reports have come to the Headquarters of the P. A. of A. that the old ticket scheme is again being pushed by solicitors, who are doing all they can by inference and otherwise, to make the photographer and merchants believe that it has the endorsement of the P. A. of A., or that as a result of our National Advertising that they will secure unusual benefits.

If a salesman comes to any studio, do a little investigating before you sign up with him. Demand a list of firms who have used his schemes. Send a dozen telegrams and see if they will recommend it. Call your stockhouse up on long distance and see what they know about it. Usually these schemes benefit first and foremost and primarily and everything else, the men who sell them, rather than the photographer or merchant.

Here is an illustration. A promoter persuaded one of our members to sign up for his scheme. He then went out and sold approximately 12,000 tickets at \$5.00 a hundred in a town of 6,000, which nets the promoter something like \$600 for a few days' work. The photographer was persuaded to sell one print for 39 cents of a photograph that he is regularly selling for \$25.00 a dozen.

Any man who knows his costs will know that this individual print would cost the photographer not less than \$2.00 and probably \$3.00 or more.

If any studio feels that they must use tickets as a sales promotion scheme, the Executive Headquarters advises them to investigate very thoroughly and completely before tying up with any promotion. It may save them a lot of grief and trouble.

—L. C. Vinson.

### The Questionnaire

The August questionnaire of the Photographers' Research Bureau, maintained by the National Advertising Headquarters, discloses the crying need of the profession for constructive merchandising plans to capitalize the national advertising effort. The new merchandising books, "Plan and Prosper" for the commercial photographers and "How to Make More Money From Portrait Photography" for the studios devoted to that branch of the industry, have been woefully needed. A very helpful sign is the almost universal acceptance of these plans by the photographers. More than 85 per cent of the photographers reporting have adopted definite plans for fall advertising, and more than 50 per cent indicate by their replies that they are using the books as guides.

In volume for the month of August, but 35 per cent of the replies reported increases ranging from 1 to 20 per cent. More than 50 per cent showed decreases volume of from 3 to 30 per cent. Approximately 14 per cent showed no change. In profit, 34 per cent showed increased, 55 per cent decreases, and 10 per cent showed the same profit as last year.

In the first eight months of the year the percentage of increases and decreases in net profit balanced. No change in profits was shown by 12 per cent, the remaining 88 per cent were almost exactly divided between increases and decreases. In volume, however, more than 50 per cent showed losses, only 45 per cent reported increases, and 5 per cent approximately equalled last year's business.

Among the interesting reasons given for increases, were a number that indicated constructive merchandising methods would bring the favorable balance about. One



photographer mentioned the fact that he covered more towns. Many small places in the country are without the services of a professional photographer, and yet the people there are just as good prospects for photographic work as those in larger towns. There is a rich field for the development of business through visits to such places. Many photographers have found such visits a source of added profitable business.

"More efficient methods" and "better local conditions" are responsible in the bulk of the replies indicating increases. "Election year" comes in for a good deal of blame among those showing decreases. Purely local conditions—local unemployment, studio moving, crops and other local factors—are second to "general business conditions" as reasons for decreases in August business.

The fall will be average, in the opinion of those returning the questionnaire. The percentage of those forecasting increases and decreases for October were exactly the same—38 per cent in each case. The remaining 24 per cent were noncommittal, or predicted an average business for the month.

### The Speaight Lecture Tour

Mr. Richard N. Speaight, F. R. P. S., who has photographed royalty of several generations in several different countries, will

bring to the United States after the holidays a large exhibit of the finest photographic work that can be collected from the master photographers of Europe.

With this collection Mr. Speaight will tour the United States under the auspices of the Eastman Kodak Company. Mr. Speaight is at present making an extensive trip over the continent of Europe, calling on the most outstanding men in the profession and selecting the work which will make up his exhibit. He is also devoting a large amount of time to the study of methods used to produce the pictures which will appear in the exhibit, so that photographers who attend may not only feast their eyes on beautiful examples of photographic portraiture, but also may hear Mr. Speaight explain the methods of the photographers who made them.

Ten weeks is as long as Mr. Speaight can be away from his business in London, but the cities selected for the exhibition and lectures will be chosen so that photographers will not have to travel great distances to attend.

American photographers learn from their own convention exhibits and contact with other photographers what is being accomplished in the United States; but they know comparatively little about what the rest of the world is doing. Therefore, it is believed that Mr. Speaight's tour will be appreciated by the profession.



## Pacific International Photographers' Association

Embracing Alaska, Alberta, Arizona, British Columbia, California, Hawaiian Is., Idaho, Montana, Nevada, Oregon, Utah, Washington

President: George W. Derbfus.....129 Twelfth St., Oakland, Calif.  
 Vice President: Ralph Young.....419 Sutter St., San Francisco, Calif.  
 Secretary: Claude F. Palmer.....215 Swetland Bldg., Portland, Ore.  
 Treasurer: S. Walters.....Bushnell Studio, Seattle, Wash.

### *To the Photographers of the Pacific Coast:*

Having had the high honor of being elected President of your organization, I first want to thank you for the trust you have in me and know the friendly spirit of cooperation that may be expected from all its members, and those affiliated with the profession.

To put photography on the map, in all its branches, means help from you all throughout the entire year. Four or five men cannot do it alone. Primarily our organization is for the betterment of

photography, building up the business of photography and helping those actually engaged in photography.

An association of this kind is not meant to be a clearing house for petty individual grievances or a photographic "shoulder to cry on." By every member putting his or her shoulder to the wheel, keeping in contact with similar organizations and tying in with them, I know that by the time of the 1929 convention in San Francisco, the world at large will realize that photography plays an important part in helping to make our business and home life complete.

Again thanking you all and looking forward to a happy and busy program for the year, I remain,

Yours sincerely,

GEO. W. DERBFUS,

*President P. I. P. A.*



A PROBLEM FOR THE P. I. P. A.

This is a character study of Mrs. Edris Morrison and J. Anthony Bill. The lady is writing an order and Bill, as customer (all part of the play), is evidently pleased with the proof, and two hundred dollars a dozen seems all right to him. Now as a professional matter, did Edris wear one white and one black stocking, or should the photographer have used a Panchro negative and a K. 3 filter? Page Harry Elton.



## Master Photo Finishers of America

A. E. Block, President.....27 Von Hillern St., Dorchester, Mass.  
 Fred. Mayer, Vice-President.....Portland, Ore.  
 Wm. J. Meuer, Treasurer.....212 State St., Madison, Wis.  
 Guy A. Bingham, Executive Manager.....Box 1020, Rockford, Ill.

### Territorial Vice-Presidents

South-Western States: W. F. Honnen.....1240 S. Main St., Los Angeles, Calif.  
 North-Western States: C. M. Coffey.....234 N. Commercial, Salem, Ore.  
 Mid-Western States: Chas. W. Lynn.....3917 Orleans Ave., Sioux City, Iowa  
 North-Central States: John H. Seamans.....7052 Jeffery Ave., Chicago, Ill.  
 Central States: E. L. Hurlburt.....315 St. Louis St., Springfield, Mo.  
 South-Central States: J. A. Hammond.....Box 650, Meridian, Miss.  
 South-Eastern States: Elon C. Robison.....105 Third St. N., St. Petersburg, Fla.  
 Great Lakes States: C. P. Phillips.....6930 Gratiot Ave., Detroit, Mich.  
 Dominion of Canada: W. A. Taylor.....274 Carlton St., Winnipeg, Man., Can.  
 Central Coast States: Wm. H. Eichner.....1210 "G" St., N.W., Washington, D.C.  
 New Jersey—New York City: J. G. Taylor.....24 E. 23rd St., New York City  
 New England States: H. K. Atkins.....Middleboro, Mass.  
 Mid-Eastern States: M. J. Koch.....535 Penn Ave., Pittsburgh, Penn.

## LARGEST CONVENTION TO DATE

There is no question about it. Salesmen advise that practically every master finisher interviewed says that he will be there. Letters to the National Office indicate that almost every progressive finisher from miles around will be there. President Bonfron of New York City writes that there will be a Pullman or two from Greater New York. The New England finishers are all bringing their wives. Koch of Pittsburgh says that there will be at least two carloads from Pittsburgh district. St. Louis, for the first time, will be heavily represented—about twenty coming. And so on.

A registration of about 450 has been our previous convention record. It looks as if there will be not less than 600 or 700 this year at Chicago.

Some rail fares for your information: One way and round trip convention excursion rates from points named to Chicago.

	One-Way	Round		One-Way	Round
	Fare	Trip		Fare	Trip
Seattle, Wash.....	\$77.21	\$115.81	Omaha, Nebr. ....	\$17.93	\$ 26.89
Denver, Colo. ....	37.28	55.92	Detroit, Mich. ....	9.81	14.71
Atlanta, Ga. ....	26.73	40.09	Richmond, Va. ....	30.51	45.76
Nashville, Tenn. ....	16.32	24.48	New York, N. Y.....	32.70	49.05
Miami, Fla. ....	52.13	78.19	Montreal, Que. ....	29.21	43.81
Kansas City, Mo. ....	16.54	24.81	Los Angeles, Calif. ....	79.84	119.76
St. Louis, Mo. ....	10.41	15.61	St. Petersburg, Fla. ....	45.54	68.31
Pittsburgh, Pa. ....	16.88	25.32	Louisville, Ky .....	10.80	16.20
Portland, Ore. ....	77.21	115.81	Des Moines, Iowa ....	12.89	19.33
Toronto, Ont. ....	17.71	26.56	San Francisco, Calif. ..	79.84	119.76
Little Rock, Ark. ....	23.00	34.50	Minneapolis, Minn. ....	14.66	21.99
Fargo, N. D. ....	22.97	34.45	Cincinnati, Ohio ....	10.26	15.39
Salt Lake City.....	55.07	82.60	Washington, D. C. ....	27.78	41.67
Boston, Mass. ....	36.73	55.09	Philadelphia, Pa. ....	29.46	44.19
			Dallas, Texas .....	34.36	51.54

Important Note: Of course, you can't buy round-trip tickets at the above figures from your local ticket agent. You buy a regular one-way ticket to Chicago and demand a "Convention Excursion Certificate" from the agent right along with the ticket. If we obtain as many as 250 such certificates at Chicago, these certificates when validated by a rail representative at the convention will entitle holders to purchase half fare tickets for return trip. So don't fail to ask your local agent for a Convention Excursion Certificate. We have succeeded in obtaining the necessary number of certificates at recent conventions.

It is not only your chance to attend the only convention covering the photo finishing branch of the profession, but is your chance to see the New Chicago. From the illustrations used in convention publicity this year, you will realize at a glance that unless you have seen Chicago within the last two or three years, it is a new and different Chicago which will greet you. It is the country's fastest growing city, taking on really mammoth cosmopolitan form. The Convention Excursion Certificate, obtained when you buy your



going ticket, will allow you to purchase a half fare return ticket, after you have had it validated at the transportation desk at the convention. Be most certain that you secure that Convention Certificate from the agent when you buy your ticket. Above is a list of cities widely separated in the country, listing what the one-way and round trip will actually cost you. You can purchase your going ticket early enough to give you a day or two stop-over en route and the same on return, but you must go and come over the same route.



Ye Editor Retaileth Neues of Ye Profession and in Quaint Italics Titillateth Ye Sphynx with Hys Quill

## Exploration In Plant Life

As one of the series of lectures in the University of California Extension Division, Department of Visual Education, Arthur C. Pillsbury delivered an illustrated talk on the above subject in Wheeler Auditorium, October 18th. Pictures in lapsetime motion showing the unfolding of flowers, beautifully colored, microscopic moving pictures of the germination of pollen, root hairs growing, nuclei emerging from grains, plant circulation and other functions of plant life hitherto unseen and impossible to see with the microscope, since more or less long periods of time cover each slow phenomenon, were thrown upon the screen.

Mr. Pillsbury has an international reputation as a photographer of botanical subjects and his films (of which 7000 feet were shown) are near perfection. It was our privilege to attend and we can state with positiveness that we gained more knowledge through our eyes in each minute there than we could hope to get from an hour of reading.

## W. J. Prater in San Francisco

Richmond has branched out into San Francisco. W. J. Prater has purchased the Dore Studio at 2085 Mission Street and will run it in conjunction with his original establishment in Richmond, Contra Costa County. Those who know Mr. Prater will be glad to note this evidence of his success and all join in wishing him more of it.

## Sergeant J. P. O'Callaghan Home

After some months at the government school of photography in the east, the jolly Sergeant is once more in his home at Crissy Field. He seemed to have lost some weight when we saw him recently, but his hearty laugh and keen sense of humor have survived the strenuous study and eastern summer. His book on "Enlarging for the Amateur" will be ready by the time this issue is in the readers' hands and we recommend it with a sincerity equal to our sincerity in praising Sergeant O'Callaghan.

## Commercial Photographers of L. A.

The September meeting of the Los Angeles Commercial Photographers Association was out of the usual order. Our President, Mr. Mott, has a beautiful and unusual mountain cabin up San Antonio Canyon two and one half miles beyond Camp Baldy. He invited the Association up there over the week end and all of the members who could get away went. It made a very lively party with both the "Deacon" and the "Kink" present.

We had some very interesting and instructive business talks; they were many sided, and brought out things that were vital to our organization and business.

It pays to get together out of our regular routine of business, as it gets us on a new side of things and one that brings out of our mind things we would like to express, but never have the time to get to a real

understanding with our fellow-workers when in regular business session.

We left Los Angeles Saturday afternoon and were up there for supper, had the whole evening and the next day to really get acquainted, and we did. Bill Bailey (The Kink) is a wonderful "Cook," so we all enjoyed ourselves. They say the nearest way to a man's heart is through his stomach—Bill found all our hearts.

Those who were not there should have been, and I know wanted to be, we thought of them between thinks.

### Miss Lois Mae Moulin

The little lady has been with us about six months and we didn't even know it till the other day. She must have been a quiet member of her sex or a successful secrecy was maintained. However, the news is out and our readers have a right to get the glad tidings. There cannot be too many Moulins and we want to welcome Lois Mae, daughter of Mrs. and Mr. Irvin Moulin. She arrived February 10th. God bless her and grant she grace this earth for the next hundred years.

### Duval Breaks An Arm

We praised Bert so highly last month that he got all pepped up and almost broke a leg getting business, and then actually broke an arm filling order blanks. At any rate he broke an arm and E. M. St Clair, the Los Angeles Agfa-Ansco representative, took the chance to come to this real city on a pretense of bringing Bert home. St Clair didn't call up to see us, so we hope this slam at his home-town gets his goat good and plenty.

### Southern California Organizes

About 40 photographers representing all the towns of San Bernardino and Riverside Counties, met at Evan Davis' new studio, on E street, Thursday, Sept. 13th, to welcome Secretary Vinson of the Photographers' Association of America, also to form club of photographers of the Orange Belt.

A committee was appointed with Evan Davis as chairman, and A. E. Field of Riverside, I. J. Miller of Redlands, A. Bowser of Ontario, to form a permanent organization at the next meeting in October in Riverside. This club will be auxiliary to the National Association and International Pacific Photographers' Association.

### Agfa-Ansco Hofmeister Back

Whenever things are moving to his satisfaction on the coast, A. G. Hofmeister packs his little, old kit bag and takes the Malolo to Honolulu, Hawaii. This is his second or third trip this year to the land of Aloha, where the palms wave and the natives sing day and night on the beach at Waikiki. Well, Gus went, saw, conquered, and came back and his friends can once more see him at the old stand.

### Thomas Morrill Moulin

Just arrived in the home of Dorothy and Raymond Moulin, this new member of the well-known and highly-esteemed Moulin family. Thomas Morrill came on September 4th, and, we have no doubt, has been heard from already and often. May the greatest blessings come to this youngster and his parents. He begins life with a wonderful family name and will carry the character of his forbears down to posterity.

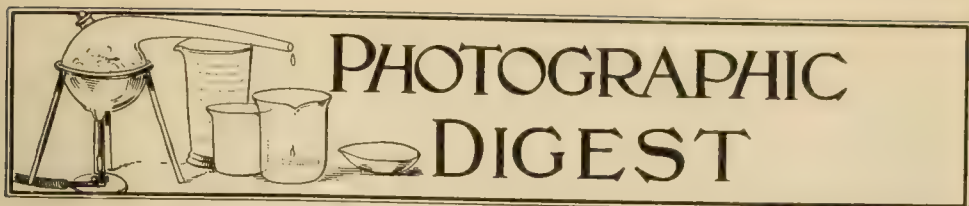
### Spencer and Stolte Exhibition

Alameda is not so minor a city when it can boast of so eminent a pair of artists as the Misses Spencer and Stolte. Their child portraiture has before now gained high ecomiums hereabout and abroad and the exhibition of work in the Hotel Alameda on Friday and Saturday, October 12th and 13th, could but impress anew on the public mind that portraiture with the camera is a high art, and that they were high in that art.

### Harry Elton and O. J. Smith

Two authorities in the office at one time. Harry Elton with the final decision on matters panchromatic, and O. J. Smith who knows all about portrait lighting and has a rare faculty of imparting it. Two more genial and modest men one cannot conceive. Harry always has a merry quip on the end of his tongue and O. J. never fails to appreciate anyone's joke. We cannot see them too often and we see them altogether too seldom.

**And the Rotogravure Display  
in the Sunday San Francisco  
Chronicle, October 28, 1928!**



Edited by H. D'ARCY POWER, M. D., F. R. P. S.

### Glycin and Stained Negatives

The use of Glycin is almost confined to slow tank development, and all those who have so employed it have, from time to time, had to suffer from loss by reason of the appearance of variously shaped stains of an intractable character. The nature and cause of these stains has been recently investigated and reported on in one of those excellent bulletins that the Lumiere Brothers and A. Seyewitz so frequently issue for our enlightenment. From this it appears that the weak solution of glycin usually employed in tank development does in fact undergo surface oxidation with the formation of an adhesive and impenetrable film that coats the surface of parts of the negative as they are immersed and so interferes with their development. As this film is transparent and colorless the glycin developer has attained a reputation of permanency that it does not possess, and the authors conclude by condemning its use for slow development which, they say, may be better carried out by metoquinone or metol-quinone. So far as the greater softness of glycin developed negatives are concerned this has been proved to be solely dependent on sufficient dilution. Some months ago E. A. Bierman pointed out the same fact in regard to developing papers contending that the various grades of soft, normal and hard could be exchanged by adapting the strength of the developer and the final result would be the same.

### Lunar Photography

Most people think of the moon as being evenly illuminated, but Mr. Tompkins lately demonstrated at a meeting of the Royal Photographic Society that there may be as many as five zones of differential illumination. It is still a problem how to even them out. I commend it to my readers.

### Chromium Intensification

A contemporary writing on the well known fact that the bichromate acid bath used in this process rapidly loses its acidity if often used attributes this loss to the porcelain dishes employed having alkaline deposits on their surface which should be removed by a preliminary wash with acid. I suppose there may be dark rooms and highly calcareous tap waters where the dishes are permitted to get into this condition, but the loss of acid and bleaching power is due to something much more fundamental than this. Every time a negative is bleached the silver deposit therein removes from the bath almost exactly one third of its own weight of hydrochloric acid. Necessarily if many plates are bleached the bath must run down, and no tinkering with dishes will prevent it. The slow action of the bath shows at once when this has happened and the addition of a few drops of acid restores activity at once. The amount added should never be much because a very acid bath gives a weak intensification by affecting the chromium deposit.

### Color Screen-Plate Technique

So much has been written on this subject and with such diversity or repetition that further notices seem scarcely called for, but Mr. E. A. Bierman, F. R. P. S., is amongst the oldest and most successful of our workers in this field and anything coming from his experience calls for consideration. His paper in the May issue of the Royal Photographic Journal should be read by all workers who have access to it. Two of his statements are of special value, namely, regarding plate latitude he writes "Is color plate work to be tied down to flat lighting? My own opinion is that it will record much higher contrasts than it is usually credited with, but the developer must be graduated accordingly. In my own practice I follow



this rule: Plates exposed in dull light 1 to 4. (Cuinomet and water). In well diffused light, 1 to 6; in weak sunlight or average interiors, 1 to 8; in bright sun or strong contrast, 1 to 10."

Dealing with the question of development time he writes: "I eventually evolved a modified factorial formula by squaring the time of appearance and multiplying by four. This works out well in practice, provided that there is a patch of white or other very light color, or some sky in the subject. The appearance and developing times are as follows: 5 seconds TA equals 1m. 40s. increased to 2 minutes; 6 seconds TA equal 2m 24s; 7 seconds TA equal 3m 16s; 8 seconds TA equal 4m 16s; 9 seconds TA equal 9m 24s; 10 seconds equal 6m 40s.

"Over ten seconds make up developer one to four, and develop for eight minutes. There is no difficulty about handling autochrome plates in a bright light—either green or red, or even orange—if the plate is not exposed directly to it for long periods. I have used a bright orange colored light, that was comfortable for bromide paper work, but I usually work with a red composed of one piece of double flashed ruby glass and one piece of orange fabric with a 60 watt vacuum type electric light directly behind it—plenty of light to see the second hand of my watch.

"To make this possible I partially desensitize the plate by placing it in total darkness, in a bath containing potassium metabisulphite 5% and chrome alum 1%. The chrome alum has no effect as a desensitizer, but is a great preventive of frilling in warm weather.

"The dish is covered, the light switched on and the time noted. One minute is sufficient, but a little more does no harm. The dish should be rocked in both directions during the whole of the time otherwise uneven patches are likely to occur. The effect of this solution appears to be to destroy the color sensitiveness, and convert the emulsion into that of a slow plate."

The writer then goes on to say that he washes the plates for half a minute, drains for another half, and proceeds with the development according to the above factorial formula in the bright light described.

## X-Ray Photography

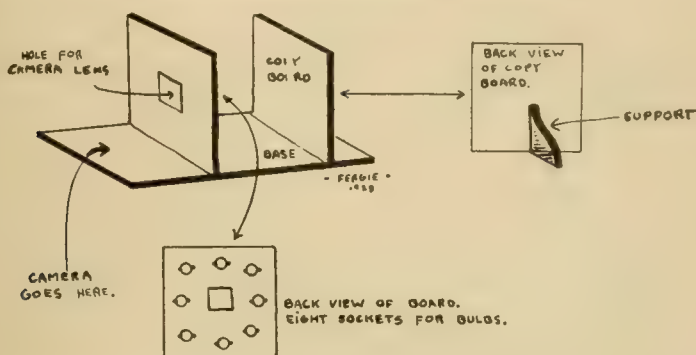
An interesting addition to the possibilities of X-ray work seems to be promised by a patent (No. 276678 G. B.) taken out by Dr. Franz Simon of Berlin, particulars of which are given below:

**X-Ray Photography.** No. 276,678 (August 25, 1926).—In X-ray photographs differences of intensity only are represented, so that it is difficult to recognize conditions, such as a small abscess, which produce only a slight difference in intensity. The invention, which obviates this limitation, is based on the following conception: In any absorption of X-rays not only is their intensity modified, but also the spectral composition. It is possible to render visible on a photographic plate the variation of the spectral composition.

The photographic layer is covered, as in color photography, by a screen, so that in taking the photograph this screen is interposed between the sensitive layer and the object being photographed. The screen consists of several transparent substances which differ in their absorptive power for X-rays. For example, a photographic layer is covered with three kinds of starch grains, of which the first is saturated with a lead salt, the second with a copper salt, and the third with an aluminium salt. Each of these kind absorbs from the mixture of rays, before the latter arrives at the layer, a part of the radiation, and each kind varies the spectral composition in a different manner. If now each kind of the three starches is arbitrarily dyed with a different color, for instance, the first green, the second blue, and the third red, the developed plate will show at the places where it has been affected by the rays of different spectral composition different visible color tints. On such a plate a shadow picture of an object will show the places where the rays have been retarded through a longer path in the object or where substances of different absorptive power have been traversed, not only by variation in intensity, but also by a change of color tint, and as the human eye is very sensitive to differences of color tint it is possible in this manner to facilitate the recognition of such places.—Dr. Franz Simon, Pariserstrasse 25, Berlin, W. 15, Germany.

# THE AMATEUR AND HIS TROUBLES

Conducted by SIGESMUND LILJEMAN



## "COPYING EASEL"

By Fergie

A simple and easily constructed copying easel for doing the usual copy work is shown in the drawing.

On a board of any convenient length is arranged the easel and the "light board," behind which the camera is placed. In the center of this board is cut an aperture for the camera lens. This board is stationary. Around the aperture are arranged eight or more light bulbs for illumination. The easel is a simple board with a brace at the back which keeps it upright.

The picture is to be copied on the easel in the usual manner. The camera is placed behind the "light board" and focused, shooting through the aperture.

If desired, tin reflectors can be placed around each lamp thus increasing the illumination, as well as shading the camera lens.

## Hints and Wrinkles

By L. C. Ferguson

Cracked enamel trays can be temporarily repaired by painting the interior with a solution of paraffin in gasoline. Make the solution just medium thick and apply with a soft brush. Let gasoline evaporate before using tray.

Always watch the face when developing

prints. Many amateurs overlook this. Ignore the background and objects surrounding the subject; when the face looks O. K. take the prints out.

Very interesting pictures of houses, automobiles, etc., can be made at night in the following manner.

Have house lights turned on. Set up camera and focus as per usual. Expose for half hour with medium stop (portrait film). Now, without disturbing camera, and with lens open, set off a small charge of flash powder illuminating the house. This gives the necessary detail.

Automobiles are taken in the same manner; expose for headlights and then give small flash to give detail to body of car.

To get pleasing snapshots, avoid violent contrasts. A subdued lighting with a dash of light on the hair (portrait) gives very pleasing results. Back-lighting in the sun is O.K. if you use a reflector to lighten up the shadow on the face. Aluminum painted cloth stretched on a wooden frame makes an excellent reflector that can be used for many purposes.

When oiling your cine kodak mechanism do not use "6 in 1" or similar oils. These oils have but little body and are practically worthless as lubricants. Use a good grade of sewing machine oil.

### Making a Print Washer

Take a good sized wooden tray, which you may make or have made, and bore a hole near the bottom of the end at one corner, likewise another hole within an inch of the top. Make these holes of the right size to take a half or three quarter inch hose. Fit in such hose of a length sufficient to reach your drain in one case and the tap in the other. Let this hose project to half an inch inside the tray and cut it so that when the part on the inside is folded up against the side of the tray it forms a cross. Tack this on. Now take some good cement like Smoothon or Aquarium cement and calk to a water-tight joint. The lower hose goes to the tap and the water will flow in at the bottom of your washing box. The top hose goes to the drain and carries off the overflow taking the hypo with it, the current being from the bottom up the heavier hypo solution cannot settle and collect.

There is a device on the market that may be purchased for three dollars or thereabouts that requires no tinkering. It is simply placed over the edge of any tray and delivers the water and syphons it off, creating a circular current that effectively washes prints or films.

### An Easily Constructed Reflector

By L. C. Ferguson

An effective and easily constructed reflector that can be used to good advantage in portrait work, movies, etc. is described herewith. The cost of making will not exceed 25 cents as the most necessary material can be found around any studio.

The tin-foil wrappers that are wrapped around cut film are used for the reflecting surface. Take the foil and after stripping off the red paper backing, smooth out the wrinkles. Procure a piece of fiber board (wall board) and cut to size. Glue the foil to the board shiny side out. If desired the fiber board can be arranged on an easel thus making it more convenient. Used as is, the board can be placed on a chair or some similar support.

Six foil wrappers from 5 by 7 films will give a good sized reflector. A good stunt, too, is to give the foil surface a coat of clear lacquer which will prevent its becoming dull.

### Common Errors

In using your Roll-Film Camera avoid tilting upward or downward more than a trifle or you will get leaning building and tottering people. Do not aim and shoot in haste without looking in the finder or you will get your friends leaning perilously to the side beyond the possibility of the laws of gravity, or even cut off their heads or feet.

If you are taking people and they face front try to center them on your negative, if they are turned sidewise place them to one side of the center and facing inward. Having subjects walking and facing out of the picture is a common mistake.

Do not try to give more than 1/25 second exposures without a tripod. Some steady handed photographers can hold the camera to their chest, stop even breathing and get a 1/10 exposure without evidence of motion. I never could perform that feat. The need coming seldom and the cost of trying being expensive I now limit myself to the margin of safety.

Do not load your roll-films in bright sunlight. There is a limit to the opacity of even lead foil, not to speak of red and black paper and the highly actinic violet rays that people the sunlight and are meeker and more subdued in the shade. Also do not twist the paper tightly around your film-spool. That extra twist sometimes causes scratches, so-called telegraph wire lines and tiny scratches on the emulsion.

Be careful that the sunlight does not strike any part of the camera, especially the front and more especially the lens. Reflections and stray rays of light have produced some weird effects in my time.

### New Use For Pyralin

A new use for Pyralin has recently been developed in the photographic field. Photoprints developed and toned in the usual way are covered with clear Pyralin sheeting. They are then put through a heating process which makes the sheeting adhere to the picture, thus giving all the protection and transparency of glass but eliminating the possibility of breakage.

Because of its easy workability, perfect transparency and the protection it affords, this material is especially adaptable for this purpose.



SALON WEEK  
IS COMING



EVERYPRINT  
A WINNER



# CLUB NOTES

## FORTHCOMING EXHIBITIONS

October 6th to 21st, 1928. Paris Salon. Closing date September 1st. Address Secretary Societe Francaise de Photographie, 51 Rue de Clichy, Paris, France.

October 6th to November 4th, 1928. Second Italian Salon. Closing date September 1st. Address Secretary Salon Italiano d'Arte Fotografica Internazionale. Via Carlo Alberto, 24, Torino, Italy.

October 17th to 31st, 1928. Second Stockholm Salon. Closing date September 15th. Ferd. Flodin, 19 Stureplan, Stockholm, Sweden.

October 25th to 31st, 1928. Fourth Zaragoza Salon. Closing date September 25th. Secretary de la Sociedad Fotografica de Zaragoza, calle de la Libertad, 18. Entresuelo, Zaragoza, Spain.

December 25th, 1928, to January 6th, 1929. Second International Salon Iris. Closing date November 15th. M. J. Van Dyck Secretary, Haanjestlei 129, Antwerp, Belgium.

January 1st to January 31st, 1929. Twelfth International Salon of Photography. Camera Pictorialists of Los Angeles. Closing date December 15th, 1928. 419 Beaux Arts Building, 8th and Beacon Avenue, Los Angeles, California.

January-February, 1929. First International Salon, Austrian Federation of Amateur Photography. Secretary, XVIII, Ferrogasse 34, Vienna, Austria.

January 15th to 27th, 1929. Tenth Buffalo Salon. Closing date November 15th 1928. E. J. McPhail, Exhibition Director, 529 Elmwood Avenue, Buffalo N. Y.

### Japanese Camera Club of San Francisco

From October first to the tenth the walls were hung with a really splendid collection of prints made by members and invited pictorialists. The noteworthy feature of the show was the exhibit of award winning pictures made by members for the various magazine competitions and salons. Messrs. Kaito, Takahashi, and Tsukane achieved between ten and twenty such distinctions in the past year and their prints constituted a small salon. This is most encouraging progress for a comparatively new organization and we cannot commend too highly the men who so ardently and persistently pursue photography for what is finest.

This collection is at the disposal of any camera club that will hold itself responsible for the careful handling and safe return of the lot or its transportation to next point designated. Correspondence is invited by the secretary, Japanese Camera Club of San Francisco, 1639 Post street, San Francisco, California.

### California Camera Club

The walls during October were given to an exhibition of the work of Ida Krajewski. These, oddly enough, are not photographs, but oil paintings. It is one more evidence that artists of the brush no longer treat with contempt or sneer at photography. And how can they when Bellows has made his best work photographic in conception. The usual hikes and parties filled the program agreeably to members of whatever tastes, and now that the rainy season is due, the tramps afield will have to be foregone many Sundays and we may look for more activity in the projection field.

### Camera Club of New York

During October, Valentino Sarra, A. R. P. S. and Dr. Orin S. Wightman exhibited their prints and reports show the public responded with attendance and appreciation. This opening of Camera Clubs to the general public is for the good of photography and we hope the practice will become general.

# NOTES & COMMENTS



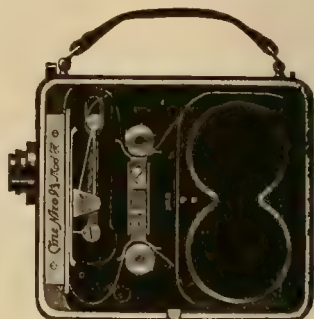
**Ingento Twin Arc Light**

Built of heavy gauge aluminum, with concave reflector and four reflective wings which direct the light and fold back when not in use, two pairs of carbons, and a gross weight of 30 ounces, this lamp will meet with instantaneous popularity. The makers claim it will burn for 40 minutes without attention when plugged into the ordinary 110-120 house circuit and that it will take ordinary, panchromatic, or sunshine ultra-violet therapeutic carbons. Folded it measures  $2\frac{7}{8} \times 4\frac{1}{2} \times 7$  inches, small enough to fit comfortably into a side pocket. The price is \$15.00, which is not the least of its recommendations. Burke and James, Inc., Chicago, will send you more details on request.

## **Burke and James Catalog**

Each issue of the orange covered catalog is thicker and contains more new, useful, and staple goods. Burke and James were ever one of the foremost wholesalers and jobbers in these United States, and after a period of comparative inaction, they awakened to a greater activity than ever and have attained to the position of one of the nation's big businesses. This catalog,

No. 180, should be in the hands of every retailer and consumer. Its list of novelties come as liberal educating factors. Write Burke and James, 223-225 West Madison Street, Chicago, Illinois, for your copy.



**Cine Nizo Cameras**

Innumerable Cine-Nizo Cameras have been sold in all parts of the world and have so satisfied the buyers that new sales resulted wherever they were in use. To satisfy a growing demand, Niezoldi and Kramer, Munich 23, Germany, now offer a  $9\frac{1}{2}$  centimeter as well as the 16 centimeter size. The cranking on these is the double drive spring motor by which each winding transfers the entire contents of the Pathe magazine M with uniform speed and absolutely without vibration. The hand-cranked models are still obtainable and in the model H it is possible to make instantaneous transition from the automatic to hand-cranking or from the latter to the former without regard to the spring having run its course. The makers claim the complete apparatus including the spring motor to be not more than 4 ounces, which seems almost unbelievable. The size overall is given as  $4-11/16 \times 4-5/16 \times 3$  inches. The firm is well known and reliable and there is no reason to in any way doubt their specifications. We marvel at the ingenuity of these Germans and recommend our readers to find more definite particulars for themselves by writing to the makers.

## Peerless Name Contest

Thousands of names were submitted, coming from every state in the Union and most foreign countries, so the task of sorting and eliminating has been a stupendous one, very few being suitable names for the product.

The number and variety of names submitted, also the wide distribution of the photographic magazines — practically the only publications that carried our advertisement, as well as the interest in and popularity of Peerless Japanese Colors, was indeed a surprise.

To those who were unsuccessful in this contest, the Japanese Water Color Company offers sincere thanks and if they will request the new illustrated catalog, mentioning that they were among the contestants, they will send a souvenir which will be appreciated.

## Lifa Recticolor Filters

We advise our readers to acquaint themselves with the Lifa Filters and by a careful reading of the literature exploiting them to learn things not of common knowledge, as to light values and color effects on sensitive emulsions. A request of Herbert and Huesgen, 18 East 42nd Street, New York, will bring either printed matter or, per your order, a filter to fit your lens mount.

## Leicas on the Byrd Expedition

After having recorded many of the important features of the University of Michigan Greenland Expedition within the Arctic Circle, and having proved their value for such work, several "Leica" cameras will accompany the Byrd Expedition to the South Pole. Complete "Leica" accessories will also be part of the Byrd equipment: tanks for quick development anywhere, enlargers for any convenient size of print and the "Uleja" projector for film-strips to project the pictures for instruction and entertainment during the long Antarctic nights.

## Vitava for Enlarging

It will please the reader to learn that Vitava can now be had in a faster emulsion for enlarging. Vitava has been a great favorite with the profession and the advanced amateur who have rued the fact

they were limited in its use to contact printing. That limitation being removed, we can all use Vitava now. It may be had in Matt White and Buff Rough, and Matt Buff Smooth, Lustre White and Buff Rough, all double weight, and in Lustre White Rough single weight, also in Semi-Matt and Matte Cream White double weight.

## The Camera Hospital

Cameras get out of condition, lenses need doctoring, tripods fail to tri or pod, and all sorts of units in the equipment need toning up. William F. Peters conducts a Hospital for photographic equipment and if there are any machines made for the purpose which his plant has not on its floor, or if there is any repair job he cannot do we should like to be told about it. If you need anything in that line write, telephone, or call The Camera Hospital, 717 Market Street, San Francisco.

## Civil Service Examinations

The United States Civil Service Commission announces the following open competitive examinations:

Junior Blue-Print Operator, Under Blue-Print Operator, Junior Photostat Operator, Under Photostat Operator, Junior Photostat and Blue-Print Operator.

Applications for the above named positions must be on file with the Civil Service Commission at Washington, D.C., not later than November 6.

The examinations are to fill vacancies in the Departmental Service, Washington, D. C.

The entrance salaries are \$1,440 a year for the junior grade, and \$1,260 a year for the under grade. Higher-salaried positions are filled through promotion.

Competitors will be rated on practical questions on making blue, brown, blue-line, and brown-line prints, practical questions on photostat operation, general photography, etc., education, training and experience.

Full information may be obtained from the United States Civil Service Commission, Washington, D. C., or from the secretary of the United States Civil Service Board of Examiners at the post office or custom house in any city.





# OUR BOOK SHELVES

## Maine of the Sea and Pines

The L. C. Page Company have published a number of books exploiting the beauties of various parts of this country under a generic title, "The See America First Series." We surmise that Europeans, who cannot come over the pond, are seeing America, if not first, then only through these volumes. And, sad to say, altogether too many Americans are doing their traveling in their own land via this route.

To us the books have brought reminiscence, the re-enjoyment of scenes revisited, the incentives to go to places not yet seen, and a treat in literature and pictures that is more objective and directly connected with the respective book that happened to be in hand.

"Maine of the Sea and Pines" is written by Nathan Haskell Dole and Irwin Leslie Gordon. They have wrought fact and figures, data and statistics into a setting of description and fancy that will charm the reader. In fact, the illustrations are somehow more matter of fact than the text. Less effort is shown to make the views pictorial than to have them authoritative, intimate and in the nature of records of the places shown.

The authors have a colloquial style and a special talent for making history a live subject. They have collected a mass of detail that has been woven into a delightful texture of story and legend. Mere names become real persons and unknown nooks are brought close to the mental eye as if shown with a stereoscope. That is it. These two writers have binocular vision and the faculty of communicating it to their readers.

A fine book and gotten out as Page gets out books. 375 pages on the best wove book stock, bound in brown cloth and embossed in gold and three colors. It comes boxed for gift purpose and sells for \$6. Obtainable through Camera Craft Book Service.

## Handbook of Photomicrography

The literature of photography is growing apace and as it has been rescued from the complacent monopoly of one or two publishers and is being enriched through internationally famous houses, like Page, Pitman and Sons, Dutton, Lippincott, and others, we are getting material that begins to make us feel photography is becoming more than recognized. It is taking its place as an essential part of all scientific reading and training, and as a science of itself. H. Lloyd Hind, B.Sc., F.I.C., and W. Brough Randles, B.Sc., Lecturer in Biology, Derby Technical College, jointly produced a most valuable book in the first edition of the Handbook of Photomicrography and Messrs. George Routledge and Sons, Limited, of London, and E. P. Dutton and Company, of New York, have, in the second edition just received, proven their appreciation of a growing market for photographic books and for advanced technical subjects pertaining thereto. This volume is superbly bound, printed and illustrated in half-tones and colorprints. Green cloth, over 300 pages, \$5, from your dealer, the publishers or through Camera Craft.

## Manuscript Market Guide

Authors, established, ambitious, hopeful, persistent will find in this generous volume an opportunity to strive anew for fresh pastures, if you will condone the mixed metaphor. This paper bound book is all it claims in being really an extended, classified, rated directory of markets for all and sundry kinds of literary work, including photoplays and jokes. Even verse is listed. Where such can be found, Ah happy consummation! all else will be easily discovered. The arrangement is perfect and to our knowledge as complete as can be made. 178 pages, large folio size, paper covers, \$2, through Camera Craft Book Service.

# CAMERA CRAFT



TWO OF YOURS, BABY

J. H. BRENNSTUL

SAN FRANCISCO

CALIFORNIA

For Perfect Pictures

(Call it  Gay-vert)

## ROLL FILM

"Rich in Silver"—"Fits All Cameras"

Ultra-Fast — Orthochromatic — Non-Curling — Non-Halation

Descriptive Catalog on Request—Address Dept. No. 4

**THE GEVAERT COMPANY OF AMERICA, Inc.**  
423-439 WEST 55th ST., NEW YORK CITY

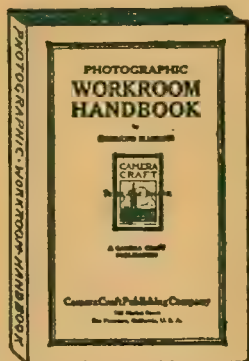
CHICAGO, ILL.  
413-421 N. State St.

PORTLAND, ORE.  
345 Salmon St.

TORONTO, CAN.  
847 Adelaide St., West

*Manufacturers of Photographic Products for more than a Third of a Century*

THE  
BEST  
TEST  
IS  
A  
TRIAL



*The Second Edition*

## Photographic Workroom Handbook

By SIGISMUND BLUMANN  
Editor of Camera Craft

**IS READY NOW**

The first edition in paper covers is exhausted and in accordance with its fixed policy, Camera Craft shares its profits with its friends by putting the surplus into production without increase of price.

This edition is fully corrected, enlarged by several formulae and

**BOUND IN CLOTH AT THE SAME PRICE  
ONE DOLLAR**

*At your dealer or from*

**CAMERA CRAFT PUBLISHING COMPANY**  
CLAUS SPECKELS BUILDING SAN FRANCISCO, CALIFORNIA







THE WATERLOGGED BOAT

*Anson Herrick*

*San Francisco, California*

Fifth Salon, Pictorialists of San Francisco

# CAMERA CRAFT

*A Photographic Monthly*  
».....«  
SIGISMUND BLUMANN, EDITOR

*Claus Spreckels Building, San Francisco, California*

FOUNDED MAY 1900

---

VOL. XXXV

DECEMBER, 1928

NO. 12

---

## The Fifth International Salon of the Pictorial Photographic Society of San Francisco

by Sigismund Blumann

(Illustrated with reproductions of some of the prints hung.)

To limit the contributors of an International Salon to such as shall be chosen by the members of a group is the privilege of that group. The plan has merits and dangers. It constitutes a jury previous to the receipt of the pictures. A jury that judges the standing of men instead of the value of their work. Based upon the previous showing of the men it puts a great responsibility on the group which arrogates the prejudgment of men and works and presupposes that the best of yesterday shall remain the best of today and that some lesser lights of the past or some dark luminary may not have blazed into greatness.

On the basis of privilege, the San Francisco Pictorialists have been within their rights, have saved themselves or what jury they may have selected a deal of work. It is not an easy task to wade through hundreds of prints, weed out inferiority and mediocrity and decide upon what shall and what shall not be hung.

As opposed to the negative points of view it must be said that the plan worked out nobly and that it gave the picked masters the opportunity of sending what they wanted to have hung and were assured that what was sent should be exhibited. They appeared before the audience in the manner of their own preference.

Put in bookkeeping form with a right and wrong side of the ledger it is up to the individual to make his own estimates.

Presuming, always, that the members of such a group do not invite with an eye to return favors, that they carefully pick their own membership, and that their invitations go to the best pictorialists





DREAMLAND  
*Floyd Vail*  
*New York, N. Y.*

Fifth Salon, Pictorialists of San Francisco

without hope of favor or fear of reprisal, the invitational idea will work out as long as it does not become general. Salons open to free submission of prints are an essential for the advancement of pictorial photography. The rising genius must be given his opportunity. The unheard of artist must have his chance or as the old masters quit or die out the art perishes with them. There is danger of a sort of union that prohibits apprentices.

And again we stress the fact that this show was a remarkably good one. Good absolutely and unusually good in the absence of prints that should not have been shown.

P. Douglas Anderson had three prints that showed his style has changed. The best of his contributions, "Character Study," while it does not nearly attain to the heights of his hilltop pictures, is a very serious bit of work and proves he has kept his hand in, so to speak, in the period of retirement.

W. E. Dassonville is always certain to produce something delicate, ethereal, and technically perfect. His three bromides pleased greatly.



INDIANA  
*C. Curry Bohm*  
*Chicago, Illinois*

Fifth Salon, Pictorialists of San Francisco

John Paul Edwards has for the time forsaken the more salable Yosemite and Sierra views that gave him prominence and has taken to Europe. A wide experience in picture-making and bromide technique helps him in his late endeavors to maintain his standards. "A Byway of Paris" and "Street in Old Nurembourg" are fine and rank with the Chaffee models which they call to mind.

G. H. S. Harding of Berkeley is always to be counted on for something to please the eye and gladden the heart. There is a luminosity and pictorialism to his work that cannot be put into language. The print reproduced will, perhaps, best convey our meaning.

Anson Herrick is always conscientious and pleasing. His bits of adobe houses, a doorway, a window, a staircase, show a masterly ability to get much from little and infuse emotional appeal into simple things.

Horace L. Hirschler shows an improvement in conception and rendering that is nothing less than remarkable. Of the three of his contributions the best is shown in this or will be in the subsequent issue of CAMERA CRAFT.

Henry A. Hussy reflects his personality in his prints. Modest, pensive, artistic to the fingertips, and a most conscientious technician.

His rendering of sunlight and shadows will open the tightest locked doors of the most guarded salons to him. We show "Sunlit Columns" as a bright example.

Of the British workers one cannot say too much or over-enthuse. There is a sincerity, a classic strength to their pictures that leaves no room for half judgment. Alphabetically enumerated from Adams to Whitehead, one may prefer one to another, but the final deduction is that as a whole an Englishman may take his sport seriously, but that what he takes seriously he does wonderfully well.

To our way of thinking, the strongest thing on the walls is by Angus Basil, and this though we are not swayed from our hitherto refusal to accept pattern as the fundamental and essential of pictorial art. In "Chenko and Alexa" we get pattern, rhythm, glorious exhilaration, and a low key rendering that is the most impressive justification of subdued key for certain lively subjects.

Our Australian cousins acquitted themselves true to their mother country traditions, and Cazaneaux and Luke bring honor to the Antipodes. Monte Luke's portrait of his friend, Cazaneaux, is worthy of study by portraitists, whether with the brush or camera. It is a model of plastic art, as well.

Before leaving the English section we must speak, and enthuse, of Lambert's portrait of Chesterton. The dignity of the picture, the placing, posing, tone, ensemble, are superb. To liken one artist to another is weak praise. To liken a photographic artist to one who works in colors would displease both, yet we cannot resist saying Whistler might have refrained from satire long enough to praise this work of Lambert.

Eschague preserved his reputation with excellent resipigmento prints and as usual dealt with folk subjects of his native Spain. He is one of the great in photography.

The Austrians have done and are doing much for photography and have carried bromoil to the forefront. Our friends, Aschauer, Karnittschnigg and Doctor Mayer, are in mind as we write this—the last named conspicuous by his absence, whether from lack of invitation (which were a woeful oversight) or from inability to contribute.

Los Angeles graced the show with some of the best from Archer, Connell, Dapprich, Riso, Kales, Pratt, Shimojima and Weston. Kales with his usual epic, heroic, talent for rendering a subject of tremendous magnitude, somehow, into the limits of a ten by twelve contest.

The New York contingent stood out creditably, thanks to Alcock, Genthe, Harting, Miss Hervey, Miss Lauffer, Petrocelli, Rabinovitch, and Vail. We are hopeless in hoping to reduce to printers' ink the exquisite singing quality of Floyd Vail's "Dreamland." Dreams do not lend themselves to materialization, and if the artist





SUNLIT COLUMNS  
*Henry A. Hussy*  
*San Francisco, California*

Fifth Salon, Pictorialists of San Francisco



FERRY BOATS  
*W. E. Dassonville*  
*San Francisco, California*

Fifth Salon, Pictorialists of San Francisco

has succeeded in fixing his gossamer texture of fancy to a sheet of paper we cannot be expected to achieve his art. But we shall try.

The Czechoslovakian masters as represented by Drtikol and Krupka may always be counted upon for startling effects. They are none the less great for the radicalism that enlivenizes their work.

Germany, Belgium and Holland had their masters represented, and one need only to speak of Missone, Bersennbrugge, Erfurth, Schiel and Donai (of Hungary) to reassure their respective countrymen of a worthy showing.

Of H. Y. Summons' pictures we have said little, because they always greet us so intimately as real friends, highly honored friends, as to make us diffident of expression for fear of over-enthusing.

Forman Hanna has so made the desert his own that if ever he were to essay other subjects we should all feel aggrieved. He has reduced that part of America, or better say aggrandized it, with his peculiar art as to constitute his works historically valuable as well as pictorially.

And now we must close. Limitations of space make it imperative to end here, but be it accepted as a truth sincerely spoken that the



RELICS OF FORMER DAYS

*William Alcock  
Brooklyn, New York*

Fifth Salon, Pictorialists of San Francisco

names omitted and the prints unmentioned were neither overlooked nor intentionally slighted. Having begun with the statement that the entire collection was of a high average and the more noteworthy for its lack of lesser prints, we need no further qualification of this excuse.

Pages might be written about each picture, and there are men who could, and more who would do so. Our readers have hit the high spots with us and can form some idea of what the Fifth International Exhibition of Pictorial Photography was and how the plan of seven men constituting the Pictorial Photographic Society of San Francisco, self-appointed jury of selection of men, worked out.

To Anson Herrick, director; J. P. Edwards, W. E. Dasonville, G. H. S. Harding, P. D. Anderson, Horace Hirschler and H. A. Hussey, secretary of the salon committee, all credit for having chosen wisely and well and to Mr. Hussey added credit for shouldering much of the labor which necessarily devolves upon a secretary.

It was a good show, gentlemen, well conceived, well carried out, and we are hopeful of good effect upon pictorial photography.



# Pyrocatechin as a Universal Developer

By C. Emmermann

Editor of "Photographische Chronik"



Pyrocatechin (variously known as Katechin, Catechol, Pyrocatechol, Brentkatechin, etc.) is a developing agent which, like pyrogallic acid, but in much greater degree, has of recent years been pushed into the background by the modern developers. It is, however, difficult to find reasons to account for this step-motherly treatment, for it has its own distinctive qualities which give it a very special value. To begin with, we may point to its many-sided usefulness. With potassium carbonate it forms a good slow-working developer; with caustic soda, one of the highest rapidity; in its third form, namely: without sodium sulphite or

other preserving agent, it is particularly suitable for the development of subjects with extreme contrasts or against the light effects. Furthermore, it is very economical. Kept in well-corked bottles, its stock solutions retain their activity for a very long time. The gradation of negatives developed with pyrocatechin is excellent, and is equalled only by that given by the best known pyro solutions, which are even today most highly esteemed by many of the older workers. For these reasons it seems permissible to review in more detail the various forms and modes of use for the pyrocatechin developer.

## *Pyrocatechin as a Slow-acting Developer.*

To begin with, we have the previously mentioned solution containing potassium carbonate. This can be made up in a single stock solution or in two. The use of two solutions is an advantage in that it gives a greater freedom in the modification of the developer for incorrect exposures or special effects. The keeping quality is also improved under such conditions, though even a single-solution form remains usable for a whole year or still longer when kept in well-stoppered vessels filled to the neck.

## CAMERA CRAFT

A convenient two-solution form may be made as follows:

A.	Sodium sulphite	cryst.	160 gms.	4 oz.
		or desiccated	80 gms.	2 oz.
	Pyrocatechin		40 gms.	1 oz.
	Water		1,000 c.c.s.	25 oz.
B.	Potassium carbonate (cryst.)		250 gms.	6¼ oz.
	Water		1,000 c.c.s.	25 oz.

The chemicals are dissolved singly in hot water in the order given, and the solutions are filtered if necessary. The solutions are then stored in well-corked bottles. If solution A is to be stored for a very long time the bottle may be sealed by dipping the cork into molten paraffine wax.

For normal use, take one part of A, one part of B, and dilute with two parts of water. With over-exposures, the solution so prepared is retarded with a few drops of potassium bromide solution, 10 per cent. If over-exposure is suspected beforehand, the full amount of potash solution is not added at the outset, but only one-half; the remainder being added later as desired.

To make a single stock solution, the chemicals as given above are dissolved in 2,000 grams of water, in the one case, and in 50 ounces in the other; the solution thus obtained is diluted for use with double the volume of water.

With potassium carbonate as alkali, pyrocatechin as said above, acts as a slow-acting developer. With correct exposure, the high-lights appear in about a minute, and development requires about 5-6 minutes for completion. Variations in temperature have practically only little effect on this developer. At temperatures between 59-77 degrees F. it is equally satisfactory in use. The negatives it gives are of grey-black color, with ample density in the high-lights and clear shadows. They therefore print rapidly and satisfactorily. By addition of potassium bromide the developer may be specially adjusted for over-exposure. For under-exposures it is advantageous to take rather more water and alkali, thus obtaining a greater degree of softness in the negatives. However, with grossly under-timed plates, the more rapid caustic soda developer will always bring out more detail.

In addition to negative development, the above described developer is suitable for papers and transparency plates. With the latter, in particular, it yields a rich, grey-black tone with fine gradation, and may be used repeatedly.

### *A Formula for Under-exposures.*

The caustic soda developer is prepared according to the following formula:

Caustic soda .....	3 gms.	3½ oz.
Sodium sulphite (cryst.).....	20 gms.	5 ozs.
or dessicated.....	10 gms.	2½ ozs.
Pyrocatechin .....	4 gms.	1 oz.
Water .....	100 c.c.s.	25 ozs.

The developer is stored in a suitable bottle, fitted with a rubber stopper. Ground-in glass stoppers are to be avoided, since the caustic alkali present will very soon have the effect of cementing the stopper fast in the neck of the bottle.

After long keeping, particularly in a bottle that has been partly used, the concentrated stock solution turns somewhat brown. This may be ignored, as the solution does not lose its developing power until it appears as dark and opaque as ink. The deterioration of the solution is considerably delayed if the bottle is kept full to the neck by addition of glass beads to replace the solution removed.

For use this developer is diluted with 8-15 parts of water. The developer works more rapidly than metol, the image appearing in from 5-8 seconds after immersion in the developer. It is therefore extremely important that the plate should be immediately and completely covered by the solution, to prevent the formation of patches or spots, either through an irregular flow of developer or the presence of air-bubbles. Development is complete within 3-5 minutes, and potassium bromide has no appreciable retarding effect except when present in considerable amount. Dilution with water decreases the rapidity to some extent and at the same time produces softer negatives. If re-bottled in well-stoppered vessels, the used solution can be employed again without showing any remarkable falling off in efficiency.

In spite of its extremely rapid action, this caustic soda developer works very cleanly. Negatives produced with it are soft in gradation, though with fuller density than is given by development with metol, amidol or other rapid developers. This developer may be used with advantage whenever the exposure has been at all on the short side, as it will bring out the greatest possible amount of detail. It is not, however, suitable for over-exposures; nor is it especially well suited to the development of papers. Its chief usefulness is for the purposes described, and for these it is surpassed by no other developer, as will readily be found by experiment.

#### *An Unpreserved Developer for Brown Tones.*

Thirdly, we come to the sulphite-free pyrocatechin developer. For this the two following solutions are prepared:

A. Pyrocatechin.....	2 gms.	$\frac{1}{4}$ oz.
Water .....	100 gms.	$12\frac{1}{2}$ fl. ozs.
B. Potassium carb. (crystals).....	20 gms.	$2\frac{1}{2}$ ozs.
Water .....	100 gms.	$12\frac{1}{2}$ fl. ozs.

Since solution B contains only potassium carbonate, it is practically stable, and even solution A, containing no preservative, will remain usable for more than a year *if stored in a bottle well stoppered and full to the neck*. When it does finally spoil, the fact will be indicated by the dark-brown color.



For use with normal exposures, mix one part of A with one part of B, and add three parts of water. This solution will be a beautiful sea-green color, especially if solution A has been prepared for some time and, therefore, oxidized a little. The mixed solution cannot be kept for long, and must be discarded as spoilt as soon as the green color has passed into a dull brown. The developer should be mixed separately for each plate and must be thrown away when once used. In spite of this it will be found on calculation that this developer is extremely economical in cost.

A minute or two after the immersion of the plate in the developer the high light usually begins to appear, and the action may be stopped after about seven minutes. In this case a wonderfully delicate negative will be obtained. The development may, on the other hand, be continued for 15 minutes, when a negative of greater strength, but not at all hard, will result. Over-development, is, in fact, not in the least to be feared. The plate may simply be placed in the developer and examined every few minutes to see how far the action has proceeded.

If the very rapid appearance of the shadow details shows that the plate has been grossly over-exposed, a few drops of potassium bromide solution may be added. This addition must, however, be made very cautiously, since the developer is greatly influenced by it.

In the case of a plate of doubtful exposure, we may proceed as follows:

Measure out in a small graduate the requisite amount of potassium carbonate solution, but add only a half of it to the developer. If the image appears in the usual way in spite of the deficiency of alkali, the plate was over-exposed and development may be completed in this solution as it is. If necessitated by great over-exposure, a few drops of potassium bromide may be added. If, on the contrary, the image appears slowly, indicating correct or short exposure, the rest of the alkali solution may be added. With decided under-exposure still more alkali may be added. Thus the developer may very simply be modified as required in special cases.

Here also potash may be replaced by caustic soda as alkali. On account of its greater power, a much smaller amount is required. Hence both solutions may be prepared in a more concentrated form and kept in dropping bottles. For this a very suitable formula may be given: 4.5 gms. of pyrocatechin are weighed out as accurately as possible, dissolved in 20 c. c. s. of water and the resulting solution is poured into a dropping bottle of suitable size. In the same way 5.5 gms. of caustic soda are weighed out as accurately and quickly as possible, since this compound readily absorbs carbon dioxide from the air. This amount is dissolved in 30 c. c. s. of water and is likewise kept in a dropping bottle, fitted with a rubber bung. The bottle

containing the pyrocatechin may be fitted with a plain glass stopper. The rubber bung is replaced with the dropping stopper immediately before use, so as to avoid leaving the latter in position in the neck for long. Once the latter sticks fast, it is generally impossible to free it without breaking the flask. Hence, while out of use, the flask is kept closed with a rubber bung.

For development, pour out 50 c. c. s. of water into a dish and add about ten drops of each solution. The mixture will be green in color. With a normally exposed plate, the image will appear with full detail in 10-15 seconds and gains density slowly as development continues up to 58 minutes. The mixed solution turns brown in use, but does not stain the fingers or the film. The undiluted caustic soda solution must, however, carefully be kept out of contact with the skin or the clothes, since it is very highly corrosive. In its diluted form it loses this harmful effect. Once used, the solution must be discarded.

In the case of exposures of doubtful accuracy, one may follow the mode of use already outlined. To begin with, only five drops of caustic soda are added, this amount being later supplemented as required. Potassium bromide is less effective in this case and may therefore be used in considerable quantity.

The sulphite-free potash developer is especially suited for fully or correctly exposed plates, whilst that with caustic soda is applicable to decidedly under-exposed plates. With the use of this developer there is possible in general a greater latitude in exposure.

Negatives developed with pyrocatechin containing no preservative have a deposit of brown color instead of the usual black. From its chemical nature such a developing solution cannot be kept for long, being rapidly oxidized by air. Brown oxidation products of unknown chemical composition separate out in the solution; in all probability they are closely allied to certain organic colored lakes. These colored products are deposited in the negative together with the silver, so that when the silver is dissolved away by suitable solvents a weak brown image is left. Though negatives developed in the sulphite-free developer appear thin, they print very satisfactorily on account of the inactinic color and, in addition, do so very quickly. They are very similar in character to the old collodion wet-plate negatives and are specially suitable for the oil and gum printing processes and for enlarging.

The above-mentioned oxidization products also account for the harmonious gradation of the negatives. These compounds exert a hardening effect on the gelatine film, so that in the high-lights, where a great deal of the lake is deposited, the gelatine is strongly hardened with a consequent dampening down of the developing action. The shadows, which have little deposit, are comparatively little

hardened and are consequently not checked in development. Thus, whilst the high-lights are held back, the shadows are given time to appear and accumulate detail. This property is particularly of use in the case of subjects with extreme contrasts or taken against the light. Expose simply for the shadows and for development use a solution diluted with from 2-4 volumes of water. Given adequate exposure and, if necessary, an addition of bromide the desired effect is obtained almost automatically.

The sulphite-free developer containing potash is also excellent for use with bromide or gaslight papers. Without any toning it gives fine brown tones with these. It is well known that almost all commercial developers made up to give brown tones contain pyrocatechin. This and still other uses of this developing agent, however, provide sufficient material for separate consideration. Meanwhile, it is confidently expected that: if this review leads others to make experiments with the various forms of the pyrocatechin developer, the special virtues of this developing agent will mark it out as one which many workers will be only too glad to use frequently.

NOTE—*We have worked with formulae given by Mr. Emmermann on plates, films and papers of various makes and can affirm the results are of such excellence as to warrant their use, or at least their trial, by our readers.* S. B.

## THE CAMERA

By James Courtney Challis

*In master-hands, the camera is not  
A mere device; it is a tool through which  
His artist-soul, keyed to its highest pitch  
Of pride, portrays most delicately what  
His inner nature holds,  
As slowly it unfolds.*

*Behind his great productions I can see  
The man himself,—the heart's deep joy and strife,  
The reachings of a mind that knows of life  
And interweaves with human sympathy  
The lights and shades that bring  
A living, breathing thing!*



# Camera Work of Moving Pictures For the Amateur and Professional

By Ernest M. Reynolds

Illustrations by courtesy Paramount Famous Lasky Studios.

(Continued from the November Issue)

## MOVING PICTURES IN NATURAL COLORS

Years of research work and an endless expenditure of money have been utilized in the gradual development of the natural color moving picture. Needless to say, in a subject so technical, both from a chemical as well as a mechanical point of view, many processes have appeared, from time to time—processes which, after a great deal of experimenting, are only found to be faulty in one way or another.

Treating the subject of natural color pictures in general, there are drawbacks which have seemed at times to nearly make them impractical. Only to those who could afford considerable outlay of money and who could obtain a large sum of money in return for their work, were color films at all practical. It has been but a short time since the color picture was first introduced in its practical form. Even now it is far from practical in the pure sense of the word, as the production cost is nearly tripled. Regardless of this excessive cost, a few hundred feet are always a pleasing change in any feature picture.

In attempting to outline the basic principles of movies in natural colors, it might be well to make it plainly understood that this field is not sufficiently developed for the layman except as an experimental proposition. First, because of its costly nature, and, second, because the chances for total failure are in a vast majority. For explanatory purposes the double-coated process will be outlined. As the first explanation of color work it is the most simple and at the same time probably the most practical at the present time. This, however, is a matter of opinion, as there are at least two other methods, both of which have their good points. But, getting back to the first process mentioned, let us consider the mechanism of the ordinary black and white camera.

It has a mechanical movement which advances the film one picture or frame at a time, in back of the lens. In the standard color camera of today the film advancing mechanism moves the film two pictures at each stroke, there being two lenses, one over the other, instead of just the single optic. One lens has a red filter in it and the other lens carries a green filter. These lenses are so placed in their mounting on the camera that they register as nearly as possible two images exactly alike, except that through the process of filtering red



*An elaborate set that suggests gay colors and strong lighting*

or green objects appear differently in the two companion frames. By this is meant that the red objects would be filtered out in one picture and the green in the other; but as to size, focus and exposure they would be alike.

The red frame will be the fastest exposure, the green being called the slow light; therefore a smaller aperture is used in the red lens. It is obvious that in taking two pictures at a time, twice the amount of negative is used. Of course, panchromatic film is used, and usually this film has been specially prepared by a super-speeding process which makes it much faster. This added step is due to the fact that in order to maintain normal action in moving pictures, sixteen frames per second must be obtained, and as the filtering process reduces the speed of the exposure a great deal, a compensation must take place somewhere; therefore, the process of supersensitizing the negative before it is put into the camera is quite essential.

This step consists of treating the panchromatic film with a 26 per cent ammonia mixed with water to produce a 40 per cent solution. After drying film it is necessary to keep in a cool place and use as soon as possible, as the negative begins to show signs of fog very rapidly. If, however, the negative is used as soon as supersensitized this trouble will be eliminated.



*A colorful scheme in greens, yellows, flesh-tints and gray rocks*

Either sunlight or incandescent tungsten lamps are used in the photographing of the color film. The mercury vapor lamp used in many studios is quite out of the question for use in color production. The electric arcs of the latest types are fairly satisfactory, but, in the opinion of the author, the high-powered tungstens cannot be equaled.

As the present day color processes seem to be based upon the two colors, red and green, these colors must be studied carefully when attempting to photograph them. Yellows and purples are the most difficult to handle, and the color producers try to keep away from them as much as possible.

The make-up for the flesh differs some in the way of tints and shades, red on cheeks and lips being much more heavily applied. In the case of using the tungsten it will be found that cheeks are always quite heavily laden with the red, best determined by actual test. It follows that these different shades vary with the different types of lighting, and make-up should be applied to conform with the illumination at hand. A far greater amount of light is required to make a fully timed color negative than it does for straight black and white exposures. It is always best to develop the negative immediately after exposure. This developing is most satisfactorily done by what is called a developing machine. One of the advantages is the loss of

(Continued on Page 573 This Issue)





DESOLATION  
*Arthur F. Kales*  
*Los Angeles, California*

Fifth Salon, Pictorialists of San Francisco



G. K. CHESTERTON  
*Herbert Lambert*  
*Bath, England*

Fifth Salon, Pictorialists of San Francisco



HOPE  
*Marcus Adams*  
*London, England*

Fifth Salon, Pictorialists of San Francisco





A BRIDGE—MONTENEGRO  
*Alex Keighley*  
*Steeton, England*

Fifth Salon, Pictorialists of San Francisco



*The contrast of browns to snow white made this a most effective set*

rack marks, which are quite troublesome when using the common rack and tank system. This developing machine moves the negative film continuously through the different courses of the finishing. After the negative has been developed and dried, it is ready for what is called the master positive printing.

This master positive print is nothing more than a contact print made upon special film stock of extremely fine grain emulsion. The positive may be printed with any good printing machine and the process in general is the same as for ordinary printing. Different experts have different ideas about just how this master positive should be printed and developed, but let it suffice to say that it is a contact positive. Of course, as the negative is double footage, two frames for each step of the camera, likewise is this master positive double footage.

After this has been printed and developed and dried it is ready for the most important and intricate step of the entire finishing. It is from this master positive that the actual color positive is to be made. An altogether different printer is now to be used, this one being called an optical printer. This machine accommodates the master positive in one side and through an intricate optical system carries the companion pictures on the master positive over to the double-coated positive film, which eventually will be the final color film.

This combining and registering action is made possible by a series of lenses and prisms. It is here where the two images as registered by the camera then printed to the master positive, are brought back to back, so to speak, upon the double-coated film. The upper frame on the master positive will be on one side of the double-coated stock and the lower frame will be on the other side. The intricate feature of this part of the work is to bring these two images into perfect alignment or a perfect match, one picture over the other. Of course, there is the film base between them. After printing this double-coated film, which is only one-half the length of the master positive as the two frames are combined, it is developed by another special machine so that the emulsion is untouched on either side.

After the regular developing routine, then comes the dyeing process, which, in its way, is quite complicated, but to see it done appears quite simple. First one side of this double-coated film is dyed red and then the other side is dyed green. By dyeing is meant more of a toning, where the high-lights are kept clear. It is the combining of the two images and the two dyes which forms the completed two-color motion picture film of today.

There seems to be one slight drawback to the double-coated color film, due to the fact that there are the two emulsions or photographic surfaces. When this type of film is screened and the projector is focused for the ordinary single-coated film, it will be found that there is a tendency for the color film to be slightly out of focus. As stated before, this is due to the presence of two image surfaces rather than just the one. With a slight adjustment on the focus the error is corrected immediately. This defect in a majority of cases is so small that it usually passes unnoticed, the beauty of the natural colors offsetting any such small defects.

The photographing of motion pictures in their natural colors has only been started, in spite of the fact that research work has been going on for a number of years, and the results we view today are those of the efforts of many experimenters and an endless supply of money.

NOTE—This concludes Mr. Reynolds' series, and we feel bold to assert our readers have shared our own enjoyment of the simple, clear text and the thoroughness of the author. We approached the final installment with regret and end the last chapter with something near to sorrow.

S. B.

*Pictures may or may not be works of art. Motion pictures need no art to justify their being. They are, and that suffices, for they move and live and carry the life and motion down to posterity.*

S. B.



# The Amateur Photoplay

By Lowell C. Ferguson

Amateur cinematography, during the past year or so, has come to be almost a permanent institution, and has occupied a prominent place in the arts and sciences. Many who previously thought motion picture work a very tricky and difficult piece of business, are experiencing new thrills and delights with their automatic movie cameras.

The more ambitious, in searching for new fields to conquer have taken up photoplay making, and in a great many instances have turned out work which compares favorably with the studio productions. Others who have no desire to go quite so deeply into the art, are acquiring a permanent record of family events, etc., through the photographing of the antics of members of the family, the pets, and so forth.

A number of things are responsible for the remarkable progress of amateur cinematography. Perhaps the first is the comparative ease with which the novice can get results. Up to the advent of the amateur camera, motion picture photography was a rather expensive pastime, indulged in only by those who were financially able to maintain a standard outfit. The cost of standard film, the processing of same, and the cost of the camera made the pastime prohibitive to the person of moderate means. Now it is different. Cameras, projectors, film, etc., can be procured at a moderate figure, making an attractive proposition to those who had previously been denied the pleasure of "making their own."

The purpose of the present article is to acquaint amateur movie fans with a few hints and ideas as used by the writer and his "crew" when engaged in the fascinating art of photoplay making. Nothing startling or revolutionary is offered—just practical methods of working which are often overlooked by the cine enthusiast.

## A FEW HINTS ON EXPOSURE

It is a good plan when starting out to use up a little footage on experimental work. The writer has found that many amateurs are deficient on the one important thing—EXPOSURE. Many times an overly-enthusiastic person will shoot his subject in a haphazard manner without regard for lighting or diaphragm setting. He has the impression (until sufficiently experienced) that the mysterious "latitude" of the film will take care of any great difference in exposure. So it will, to a certain extent; but we cannot reasonably

expect the versatile film to yield good results when no care is used in the lighting and exposure.

As a preliminary experiment, select a scene in moderately bright light and set the diaphragm—any opening within reason. Now get a large card—8 by 10, or even larger, and write the diaphragm setting on it and put it alongside the subject and photograph it *with* the subject. Make other diaphragm settings and shoot the scene from different angles, each time marking the diaphragm on the card and photographing it as before. Mark down the light condition, time of day, etc., when making the various stop changes. Also in order to avoid confusion, number each card, viz., 1, 2, 3, 4, etc. When the film is developed you can see instantly which stop setting was correct, and as the light condition is written down you have all the data correct and instantly available.

As stated in a previous paragraph, it is comparatively easy to get good results. However, study and some thought must be combined if we are to get satisfactory results.

## ARRANGING THE STORY AND CAST

Assuming that you have a fair knowledge of exposure and have made some film, we will start the making of a simple play.

If it is your first attempt at making a play, don't try to film something elaborate—be content to crawl before you walk. Later on, when you have acquired confidence and experience, you can tackle something larger. A simple play is much easier to film and will be the means of your acquiring helpful knowledge.

If you are writing the play, as well as planning to do the photographic work, this much can be said: Do not attempt to be cameraman, director and property man combined. Your play is apt to wind up disastrously. Get someone who can handle people effectively to do the directing. This leaves your mind free to concentrate on the lighting and camera work.

If you are assisting in the selection of the cast, try to select agreeable people who will not work in opposition. Quite often an atmosphere of jealousy prevails which hinders the work. Of course, with members of the family it is different—they are generally willing to help—but with strangers, particularly those of your own age, there are always some to be found who maintain a "know it all" attitude, and try to butt in and spoil the work.

In writing the story, expose the "germ" or main idea in the first few scenes. This enables the audience to grasp the meaning of the play. For example, we show a scene of an elderly man scanning the columns of a matrimonial paper. There is the theme—this elderly bachelor in search of a wife. From then on the audience is in a position to know what it is all about and can follow his carryings on.

Do not write a meaningless jumble of scenes have at least a semblance of plot. Insert surprises, suspense, etc., throughout the story. Do not write in interior scenes unless you are sure you will have lighting facilities available. Simple outdoor plays are not hard to write and will save the expense of arc lights, etc. However, if you have lights available, don't hesitate to write in the necessary interiors.

For the benefit of those who might be interested in the correct manner of constructing plots, the following is given. Apologies to Mr. Wycliffe A. Hill.

"The student will bear in mind that all dramatic plots deal with the desire of someone for something and the obstacle, or succession of obstacles, that present themselves in the way. The manner and character of the obstacles which appear, the means used to overcome them, and the positions of jeopardy which arise, constitute the plot."

Mr. Hill goes on to say:

"It must be remembered that, when completed, the plot does not merely deal with the efforts of the character to obtain the thing desired by him, or her, the obstacles which stand in the way, and the means that are used to overcome them. Every other character that is brought into the plot has his, or her, object of desire, also. In other words, the principal characters act as foils for one another while the less important ones provide 'support' or 'atmosphere' for the opposing factions."

If the above is too complicated and entails too much work, you can resort to any of the several books now on the market dealing exclusively with the amateur photoplay. It is not at all necessary to write your own play, but as the "stock" plays have been done to death it makes an interesting pastime in itself this writing of original plots.

## SHOOTING

Before shooting a scene, if you are not sure of the amount of footage required, have the director put the actors through their paces while you run the camera EMPTY, watching the footage indicator until the scene is ended. This enables you to tell the amount of footage required for each particular scene. Simple, isn't it? So simple it is almost laughable; but it is generally these simple things that are often overlooked. Oftentimes a scene is started only to find that it required more footage than was available. Film has a nasty habit of running out right in the middle of a scene. The moral is: Time each scene before shooting.

If you have a variety of lenses available, use one of LONG focus for the close-ups. This gives the image a beautiful "rounded" effect impossible to secure with the short focus lenses.



# Photographic Christmas Stationery

By Sigismund Blumann

So many original ideas come into existence each year at this time, responsive to our regularly exploiting technical information not commonly known, that we are encouraged to continue in the practice.

Those of you who find in what follows a repetition of some things previously covered, or already know what this text offers, will be kind in accepting it as a fact that many new readers, many less versed in photographic technics have come into the field.

First let us utilize the materials on the market. Ready sensitized papers and postcards. Vitava T and Nokoline are two very thin papers. Outline Special is another that interchangeably offers opportunities for making pictorial letter-heads, greeting folders, and envelopes to match.

Just take an appropriate negative and mask or vignette it where you want the picture. You shall be told about vignetting presently. Fold your sheet to the size in which it is to go into the envelope and match the texture with a bond paper obtainable at any paper warehouse. Cut your envelope by hand and the job is completed.

Many like color and the papers named lend themselves to water or oil coloring. If you desire the entire paper scheme to be in pale green, fitting to Christmastide, buy a package of Diamond Dyes for mixed goods and make a very dilute solution, or dilute green ink with water and add a few drops of vinegar or a few grains of salt to each ounce of the liquid. In this, dye the photograph and envelope before glueing, of course.

Vignetting is simple and effective. Take an empty plate or paper box and cut out an opening in the cover of the size and shape which you desire for your picture. If you want a cloudy outline, cut a jagged opening and glue some cotton batting around the edges which pull out a little into a fuzz. Lay this over your printing frame and expose. Refinements in the operation may be obtained by pasting tissue paper inside this cover as a diffuser or by moving the vignetter about slightly to soften the outlines.

Japan Parchment effects are gotten on certain brands of Haloid papers. Nippon Crepe is a remarkable surface that cannot be described but is peculiarly fitted to holiday cards. Crystal Stipple is gorgeous in its crystalline surface and should give startlingly realistic snow scenes. Old Master is very like the classic canvas of the artist. These may be cut to size or better feather edged or deckled as follows:

When the print is made and dried lay it edge for edge on a piece of thick cardboard and with very coarse garnet abrasive paper grind or rasp the edges one after the other to the desired finish. To give this deckle a scorched effect touch it up with diluted brown ink or photo water-color. Or you may gild it with Devoe's Gold Poster Color or any gold paint which contains no oil. Dappled with alternate daubs of green and red such an edge would be a novelty for the holidays.

What pictures to use may be a problem to such readers as live in cities or in the west where snow never falls. I have resorted to copying from the masters, and one of my Christmas cards which received praise was a photograph of a Corregio painting. Around this I printed (double-printed) a border which was purchased in the open market. Such a border can be improvised by cutting out and copying from the advertising pages of some of the finer magazines. Use a commercial or very slow emulsion, develop in a contrast developer and build up considerable density. If the lines are not perfectly clear and clean, reduce in Farmer's Reducer, which is only plain hypo (one ounce hypo to four or five of water) with just enough Potassium Ferricyanide added to tint it pale yellow. Soak the negative for a very few seconds and wash off, then look through it. If not clear, try again. If you have cuts or abrasions on your hands use rubber gloves. All cyanic salts are poisonous.

A novelty that seemed to excite considerable admiration was stationery made of one of the thin paper on which I had under-exposed a view of our garden. This showed so faintly gray that when the paper was written upon the writing was clearly legible and the picture still showed through. A little experimenting will get the proper density for you.

Perhaps the simplest thing, yet, is to mount the picture you want on a bit of snow-white board, draw what design or sentiment you want over, under, or about the picture and copy the whole with the slow plate or film mentioned above. This will give you a negative from which you can print as many copies on whatever paper you want.

Should you desire to sensitize your own paper, cardboard, or silk or linen, refer to the article by Dr. H. O. Mead in the September issue of Camera Craft (page 424) wherein you will find not only useful formulae but references to other sources of information.

The making of home produced holiday and greeting cards is not only a pleasure to the maker but conveys a personal touch which the goods of the shop cannot. You are giving your friends something you worked for them and that does not suggest a casual following of the lines of least resistance. In a word the thing looks less like money and more like affection. And so, in the vernacular, "Go to it."

# Life and Work of the Late Eadweard J. Muybridge

By Janet Pendergast Leigh

The name of Eadweard J. Muybridge may be known to many of you. It is a name that reflects credit of the highest order on your profession.

In 1875, more than half a century ago, as Director of Photographic Survey of the Pacific Coast, for the United States Government, Mr. Muybridge went to Mexico, Central America and the Isthmus of Panama, to make an exhaustive photographic survey of the country. At that time malignant fevers were rampant, there were swarms of insect pests. Many men still lived on ships to avoid the unbearable horrors of the swamps, yet Mr. Muybridge stuck to his task and faithfully fulfilled his mission.

When you consider that the old wet plate process was used, and that the developing had to be done without delay, in the all but inaccessible and difficult places the photographs had to be taken, with the climatic and physical discomforts added, men of your profession have paid the highest tribute to the results he obtained.

In the Spring of 1872, Mr. Muybridge was consulted by the late Leland Stanford, former millionaire governor of California, to learn if it would be possible for the camera to prove that a horse, at a certain gait lifted all four feet off the ground at one time. Instantaneous photography was an untried field, but with courage and determination characteristic of Mr. Muybridge, he gave all the time he could spare to the experiment. Many exposures were made before success was won. The discarded negatives, with their varying degrees of failure and near-success prove, the evolution of the first picture ever taken of a rapidly moving object; for in May, 1872, Mr. Muybridge was successful in taking a photograph of the famous race horse, "Occident" owned by Governor Stanford. While there is no claim that this photograph was a clear cut snap shot in the light of today's work, it was sufficiently clear to prove, beyond cavil, the mooted question, that a horse, at a certain stride, did lift all four feet off the ground at one time. It proved, also, to the scientific world of photography that a photograph could be taken of an object in motion.

From Mr. Will Day of London, England, authority on all matters of cinema history, I have the following:

"From my old friend, Mr. Carter, Librarian at Kingston, England, who was a very great personal friend of Mr. Muybridge, I



was able to secure the very glass disc that Mr. Muybridge made of a horse trotting, lifting all four feet off the ground at one time. This picture was taken of a horse named 'Occident' in May, 1872."

Speaking of his later work done in 1878, after his return from Panama, Mr. Day continues:

"Mr. Muybridge is a name that one should be very proud of in the marvelous work he did and the wonderful way he accomplished the results he obtained. When you think it was done with the old collodion wet plate process, one cannot but admire the ingenuity and perseverance of this great man. He undoubtedly laid the foundation, in a somewhat crude manner, for cinematography to follow."

Mr. Muybridge was a genius and a tireless experimenter. To overcome the necessity of coating and sensitizing each plate before putting it into the camera, he eventually produced an emulsion that would allow of an exposure of 1-5000 part of a second.

It was in 1878 that several of the results of the Muybridge work were published. Some of these are to be found deposited in the Library of the Smithsonian Institute. From the Administrative Assistant to the Secretary in a letter written recently, I have this information:

"The National Museum has the most extensive collection of Muybridge material in existence."

His work was also commented on in the "Scientific American" of New York, on October 19, 1878, and in several of the Continental Papers such as "La Nature" of Paris, on December 14th, 1878, describing the whole process in which he took a series of pictures of the horse in motion.

The experimenting of Mr. Muybridge did not stop, however, with the taking of instantaneous pictures. Long before Mr. Edison had invented his motion picture camera, or George Eastman the film, Mr. Muybridge was successfully exhibiting motion pictures. Quoting from the "London News," March 18th, 1882:

"At the Royal Institute of Great Britain, a select and representative audience assembled to witness a series of a most interesting demonstration of 'Animal Locomotion' in relation to Design in Art, given by Mr. Muybridge.

"By the aid of an astonishing apparatus called a Zoopraxiscope, which the lecturer described as an improvement over the old zootrope, the animals suddenly became mobile and beautiful, and walked, cantered, galloped and leaped over hurdles in the field of vision in a perfectly natural and life-like manner. Finally men appeared on the screen and walked, ran, leaped and turned back somersaults to admiration . . ."

The zoopraxiscope was devised by Mr. Muybridge on the principle initiated in the early part of the 19th century by the Belgian physicist, Plateau. A detailed description of the apparatus is given in a work by him, "Animals in Motion." This book was published by Chapman and Hall, Ltd., London, in 1898. It may be found in the libraries of the larger cities in the United States.

It will be interesting to you to know that the first moving picture theatre in the world was built for Mr. Muybridge, financed by the University of Pennsylvania (with which he was connected for ten years, doing photographic research work) at the Columbian Exposition at Chicago, in 1893. This was called "Zoopraxographical Hall." Although this theatre did not show a film, it did show moving pictures for which Mr. Muybridge received a certificate of honor which read:

"The photographs made by Eadweard Muybridge under the auspices of the University of Pennsylvania, show with great precision the locomotion and movements of animals, including man."

Let me give you some rather startling, and highly interesting statistics taken from an article published last March in the New York Evening Journal. Commenting on the work done by Mr. Muybridge in 1878, the Journal states:

"Governor Stanford had bet \$25,000 that a horse, at a certain gait lifted all four feet off of the ground at one time, and those instantaneous pictures taken by Muybridge, proved it and were shown on the screen in 1883. The argument, over a horse, out in California started the pioneering that brought the motion picture into existence." Here are the statistics:

"Number of film theatres in the world.....	50,000
Number of film theatres in the United States.....	20,000
Persons employed in America.....	300,000
Average weekly attendance in U. S.....	130,000,000
Permanent investment in U. S.....	\$1,500,000,000
Annual expenditure in U. S. for admissions.....	\$550,000,000"

It must be very gratifying to you to feel that one of your brother photographers, over half a century ago, had perseverance enough, and determination enough in the face of what seemed inevitable defeat, to "keep on keeping on" until he had obtained results that sent the ball rolling for the future development of such a gigantic enterprise, beyond the dream or vision of anyone at that time. In his later work, Mr. Muybridge collaborated with other scientific men of note; but it is to be remembered that from his early efforts in 1872 grew the future developments.

These bare facts and their simple statement will, no doubt, stimulate the reader's imagination and, let me hope, serve the larger purpose of remembrance.

# Competition Rules *for 1929*

**A**T THE suggestion of many contributors to our monthly competition we changed from the monthly awards to cash and trophy cup given at the end of the year. During the last year this policy received more adverse comment than the old way and there was a falling off of interest, number of prints, and quality.

With all due respect to those who suggested the 1928 method we now return to the first system of monthly awards, and certificates of merit for all winners.

The prizes shall be differently selected and we are open to suggestions as to what shall be most acceptable. The value of each, other than the medals, being given let us hear from the interested readers. We want to please and benefit you.

The first award in each class shall be a medal, silver for the advanced and bronze for the amateur, the advanced second something to the value of \$5.00, the second for the amateur to the value of \$3.00 and to both shall be added one year's subscription to Camera Craft. The third award for the advanced is to be two years' subscription, for the amateur 18 months. The fourth award for the advanced 18 months' subscription, and for the amateur one year. The fifth for the advanced one year's and for the amateur 6 months' subscription to Camera Craft.

## RULES

Prints must have name and address, city, state, and country on the back.

Prints shall be returned only when stamps sufficient to cover are enclosed with the pictures. Do not send stamps under separate cover as it is possible they may not be connected with the identity of the sender of prints.

Prints may be in black or sepia but tinted and painted photographs are debarred.

In order that reproductions may be made to the best quality white paper is requested. Buff paper mounted with other prints on white show at a disadvantage.

Prints must be in before the 5th of each month to be entered in the succeeding month's competition.

There are no rules or other restrictions. No coupons, no conditions. Send of your best. Send every month. Do not send large batches. Six is plenty. One good print stands a better chance than twenty left-overs.

## Camera Craft Publishing Company

703 Market Street, San Francisco, Calif.





FIRST AWARD  
*Advanced Class*  
*K. Takahashi*

## CAMERA CRAFT

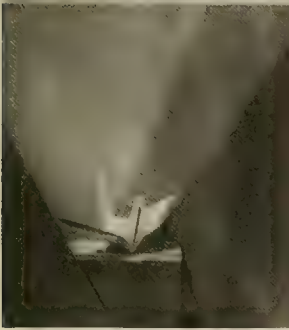


2



3

5



4

Advanced  
DECEMBER  
1928



SECOND: *Dr. Max Thorek*  
FOURTH: *H. Kira*

THIRD: *Edward Alenius*  
FIFTH: *Fr. Pfennigbauer*

## ADVANCED COMPETITION

December, 1928

Peder Aano  
Edward Alenius  
H. Auerbach  
John Bartchell  
A. F. Bouton  
Gustav Breitel  
K. Burgersdoffer  
Jean Convie  
Michael Delaney  
G. P. De Lucci  
A. V. Del Vivre  
Marcus Elton  
W. Eventon

Tomohisi Furaya  
Alfred Gunsby  
H. Y. Hara  
Ned Hungerford  
E. Gordon Jones  
H. Kira  
Dr. K. Koike  
A. J. Krupy  
Donal MacDermid  
Torfinn Michaelsen  
John Morris  
Dr. Paul Neigebauer  
Miss B. Newman  
Charles Nutting

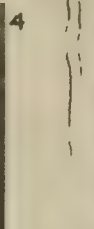
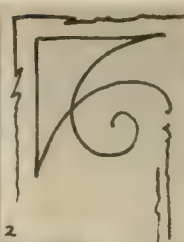
Dr. B. J. Ochsner  
Franz Pfennigbauer  
Osmond Ramon  
Ilford J. Reid  
Maurice Smith  
K. Takahashi  
Dr. Max Thorek  
A. M. Tomlinson  
Dr. P. J. Ulman  
Harriet Upton  
Johan Webhaft  
J. S. Weil  
Miss S. Zetter



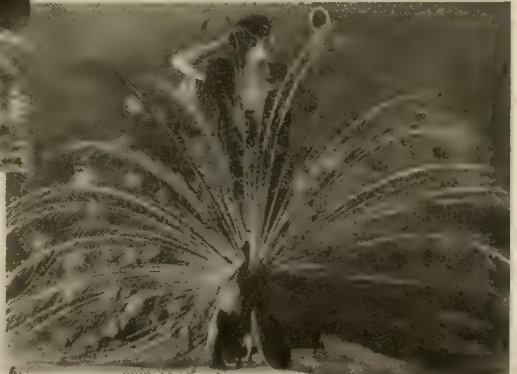
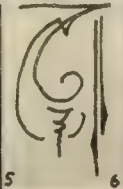
FIRST AWARD  
*Amateur Class*  
*Mrs. W. F. Eldridge*



# CAMERA CRAFT



DECEMBER 1928  
AMATEUR CLASS



SECOND: *William Vestal*  
FOURTH: *C. E. Lamphere*

THIRD: *T. Kawaguchi*  
FIFTH: *Allen Frazer*

## AMATEUR COMPETITION

December, 1928

Miss Therese Alman  
John H. Becker  
F. O. Blake  
J. Blumenthal  
G. Brun  
S. Bruzas  
Dr. Frederik W. Buncky  
C. K. Carr  
C. C. Chan  
A. W. Clark  
O. W. Conrath  
C. Duval  
William Eckman  
L. E. Edmondson  
Mrs. W. F. Eldridge  
E. K. Foreman  
Allen Frazer  
Richard Gluck

P. H. Grant  
A. S. Green  
Walter J. Grunst  
Miss K. Hanna  
Charles Hollis  
M. E. Hotchkiss  
J. C. Ilvery  
Miss R. Inman  
Dr. Marcus Jauss  
Arthur L. Jones  
T. Kawaguchi  
J. C. Keith  
K. Kojimoto  
Raymond J. Drantz  
C. E. Lamphere  
G. T. Matsuda  
K. Matsuki  
Robert A. Moss  
Louise Anne Nelson

Fred Norris  
C. K. Nusbaum  
Dr. Thomas Otten  
F. L. Owen  
Sibonar Paro  
Miss Edith Pierce  
T. C. Richards  
Nolan Richey  
K. Shimizu  
Bourdon P. Sun  
Dr. M. Thalman  
T. K. Tsukani  
Katherine Ulrich  
M. Uyeki  
Mrs. F. J. Vantrot  
William C. Vestal  
P. O. Weston  
W. Woestman  
S. Yamamura



## E. J. WALL. REQUIESCAT

When the history of photography comes to be written with a pen dipped in a more sentimental fountain than data, the name of E. J. Wall will be mentioned as having had more than a great memory for scientific facts, a deep knowledge of photographic science, a greater influence than that which comes of learning. He was among the foremost as a scientist in the branch of physics which he made his life's work, but his influence on photography and upon photographic literature went so deeply into the humanities as to constitute his great, his real achievement.

To such as may require explanations let this suffice: Men may pursue as the object of their useful existence such sciences as lead to great profit, wide fame, stupendous things, but such an one as devotes his studies and the whole of his existence to photography gets very little for what he gives, and gives much for which he hopes to get and cares to get no more than the pleasure of doing.

He is dead, and his place cannot be filled. His books remain as monuments, and we go to them as final authorities. His memory cannot die, for the products of his work and knowledge are a wealth in which we all share.

To those near and dear to him our heartfelt sympathy. To his associates condolences. They will miss him as few outsiders can appreciate.

These lines from an humble source can add nothing to the standing of the subject, but they constitute a wreath of white roses from all who have a part in the existence of Camera Craft, and amongst the flowers will be found a sentiment evolved from human hearts.

### AUF WIEDERSEHEN

By SIGISMUND BLUMANN.

*When comes the time for friends to part,  
And doubts arise of ever meeting more;  
When dear ones, bound to our very heart,  
Stand weeping as we leave them at the door,  
How wonderfully soothed becomes the pain  
At hearing just the words "Auf Wiedersehen."*

*Far back in youth my memory recalls  
A fateful time, a gloomy parting day,—  
The sun grows dim again, the shadow falls  
As if the night were setting on my way.  
And o'er the years I seem to feel again  
The consolation of "Auf Wiedersehen."*

*Auf Wideresehen! Alas, how oft the phrase  
Has voiced a hoping ne'er to be fulfilled!  
Yet will the heart revert to happy days  
And sentiment, unreasoning, self-willed  
Finds still a pendant to the golden chain  
Of years gone by, the cross, Auf Wideresehen.*



A Merry Christmas  
and  
A Happy New Year  
To You  
Dear Reader

**(O)**nce more the year has run its course and the pregnant season of good will and brotherly love is here. It is a time for stock-taking in matters of earthly relations and the conditions of the soul.

Speaking for all connected with Camera Craft this will convey our appropriate sentiments and best wishes. In behalf of Ida M. Reed and myself let us project into space to everyone, friend and unfriend, reader or non-reader of these pages, our regrets for any annoyance or pain unintentionally given, our most humane and kindly feelings for our kind.

May God grant you a most happy holiday season. May the teachings of Him who was born, who lived, and died, to bring the Divine Message to earth intervene between us, whatever our faith, whatever our capabilities of belief.

May the New Year bring you health, happiness and success. May blessings be upon you and yours. May you be heartened by eternal hope. God be with you.







## Association News

JOHN R. SNOW, Mankato, Minnesota, *President*  
CHAS. AYLETT, Toronto, Canada, *1st Vice-president*  
D. D. SPELLMAN, Detroit, Michigan, *2nd Vice-president*  
GEORGE STAFFORD, Chicago, Illinois, *Treasurer*  
C. W. HOWSON, Minneapolis, Minn., *Chairman Commercial Section*  
PAUL TRUE, New York City, *Chairman Manufacturers Bureau*  
L. C. VINSON, 2258 Euclid Ave., Cleveland, Ohio, *General Secretary*

### Hook Your Business to a Million

We often wonder if the profession gets the full meaning of a National Campaign and the importance of the million dollars spent in its consummation.

A billion spent in however efficient a manner cannot take the public by the nape of the neck and the seat of the trousers (gentlemen only, please, in this respect) and deliver them perforce to your studio. It can, and it does, take a lackadaisical public and makes them picture hungry. It ripens the fruit of demand on the tree of business and leaves you to pluck and enjoy.

The National Campaign is spending a million dollars on photography. Every dollar you spend on advertising your, YOUR, photography, is hooking your, YOUR, business to a million dollars. To the wise, quantum sufficit, which translated from the Chaldean means "That should hold you for a while." Critics of classic languages are invited to correct the rendering, but they can find no error in the deduction.

Hook your, YOUR, business to a million dollars. That is the point.

### December Advertising

Telling the American public the story of the new Long Distance Commercial Photography Service, the December commercial advertising of the Photographers' Association of America will broadcast the message of this service to nearly twelve million readers.

The caption of the advertisement, "A Nation-wide Photographic Service," is graphically interpreted by the map of the United States outlined against a background of photographs. "Service in the United States and Canada," the sub-caption

adds. Then the advertisement is divided into two parts—one which gives the background and paints the picture of the responsibility of the service, and the other which tells the ease with which busy executives can take advantage of this service.

This section of the advertisement is headed "Your local commercial photographer can get that distant photograph quickly." Nearly every man who is in the market for commercial photography is frequently faced with the difficulty of obtaining distant photographs. He will welcome a solution to this vexing problem. The caption will interest him, lead him to read the text.

"You've often wanted a photograph of some subject in a city a hundred or a thousand miles away," the text will tell him. "Now you may have it quickly, and without a bit of bother. Just telephone the man who takes your regular commercial photographs. Tell him your requirements. He will transmit your instructions to an associate in the distant city, who will take the photograph. A print will be delivered through your regular photographer, in the usual way."

The other division of the copy is headed "Sponsored by the Photographers' Association of America."

"This exchange service is under the direction of a powerful trade association composed of the most able and alert commercial photographers in the United States and Canada. This is your guarantee of dependable economical service.

"There is an interesting book called The Four Thousand Mile Lens that tells all about this service and suggests many ways in which you can use it to good advantage. Your local commercial photog-

*A Nation-Wide Photographic Service.*

Sponsored  
by the

PHOTOGRAPHERS  
ASSOCIATION  
*of America*

**T**HIS Exchange Service is under the direction of a powerful trade association composed of the most able and able commercial financiers in the United States and Canada. Your guarantee of dependability is on equal terms.

There is a true neighborhood called Little India and Malians, their role all about the scene, and huge to some way in which you cannot to pass it. A large. Your last moment to please, rushing with glides at a new scene or with National Avenue. The Headquarters. Photographers Association of America. A New Market Street. In many cities, Indiana.

**Your Local Commercial  
Photographer can get  
that distant photograph  
*Quickly!***

**Y**OU'VE often wanted a photograph of some subject in a city a hundred or a thousand miles away. Now you may have it quickly, and without a bit of bother. Just telephone the man who makes your regular commercial photographs. Tell him your requirements. He will transmit your instructions to an associate in the distant city, who will take the photograph. A print will be delivered through your regular photographer in the usual way.

rapher will gladly give you a copy, or write National Advertising headquarters, Photographers' Association of America, 136 East Market street, Indianapolis, Indiana."

This advertisement is the third of the fall commercial series. The portrait series will also continue in December. The third of this series, "and this is DAD," will appear December 1, in half-page size.

The text makes a heart-stirring appeal to the head of the family.

"Never would he ask you for a photograph," it begins. "For such is the way of the world at seventeen. But, just the same, there is nothing—except mother's photograph—that he would hold in as high esteem. To him you are the greatest man the world has known. He wants to show his companions a likeness of that rare creature—the perfect parent. You owe it to yourself, and to your family, to have a new photograph made."

That's a strong temptation for the dad whose son is in college. He is mighty proud of that boy away at school; and there are several millions of him in the United States. Certainly there is a great opportunity for portrait-selling among the more than eighteen million readers of these three magazines in the United States and Canada.

The illustration carries out the boy at college idea. It shows two boys in a setting that suggests college—the edge of a pennant, a desk-top, and a shelf of books.

The National Advertising Campaign offers an excellent opportunity for the wide-awake photographer to cash in through local tie-up with the continent-wide publicity. The desire for photographs which these advertisements are building up will mean business for the photographer who goes after it aggressively.

Now turn back and read "Hook Your Business to a Million."

PHOTOGRAPHS  
*Live Forever*

# PHOTOGRAPHS

*Tell the Story*



## Master Photo Finishers of America

A. E. Block, President.....27 Von Hillern St., Dorchester, Mass.  
 Fred. Mayer, Vice-President.....Portland, Ore.  
 Wm. J. Meuer, Treasurer.....212 State St., Madison, Wis.  
 Guy A. Binzham, Executive Manager.....Box 1020, Rockford, Ill.

### Territorial Vice-Presidents

South-Western States: W. F. Honnen.....1240 S. Main St., Los Angeles, Calif.  
 North-Western States: C. M. Coffey.....284 N. Commercial, Salem, Ore.  
 Mid-Western States: Chas. W. Lynn.....3917 Orleans Ave., Sioux City, Iowa  
 North-Central States: John H. Seamans.....7052 Jeffery Ave., Chicago, Ill.  
 Central States: E. L. Hurlburt.....315 St. Louis St., Springfield, Mo.  
 South-Central States: J. A. Hammond.....Box 650, Meridian, Miss.  
 South-Eastern States: Elon C. Robison.....105 Third St., N., St. Petersburg, Fla.  
 Great Lakes States: C. P. Phillips.....6930 Gratiot Ave., Detroit, Mich.  
 Dominion of Canada: W. A. Taylor.....274 Carlton St., Winnipeg, Man., Can.  
 Central Coast States: Wm. H. Eichner.....1210 "C" St., N.W., Washington, D.C.  
 New Jersey—New York City: J. G. Taylor.....24 E. 23rd St., New York City  
 New England States: H. K. Atkins.....Middleboro, Mass.  
 Mid-Eastern States: M. J. Koch.....535 Penn Ave., Pittsburgh, Penn.

### The Convention

As this is being written the convention is in session, and if our material self could project itself to Chicago as our heart and spirit does, these lines might tell you what is going on and who is to be your next president, who are to be your officers during the coming year.

The program lies before us and makes this staying at home irksome. We would be with our brothers, doing, seeing, hearing, enjoying, and profiting. But as that cannot be, we recommend you, who, through similar inability to attend, or willful neglect of your own best interests, to study that program and feast in imagination on the good things being offered more fortunate, more perspicacious individuals.

Full reports will be published as they come to us. There can be no originality in such data as we recount it, but perhaps our opinions and deductions may, as in the past, prove interesting to you. In that hope they will be offered.

### What Price Success

Times are always bad, times are always good, with some. When business is humming you can find idlers in the market place. When there is said to be a period of dullness you may see some working overtime to keep up with the demands made upon their services. Small craft may be borne down the tide, but the powerful boats can defy the currents and move upstream.

Photo Finishers are not different from other humans. There are successful amongst them and failures, industrious

and indolent, wise and stupid, and the proportion of each is very like what may be found in other industries. The one difficulty against which the Finisher must fight more than men in other lines is that of an easier made, a more quickly matured competition.

Finishers spring up overnight and seem to get the tendrils of growth into the soil quicker than in any other line of business. This furnishes the rank and file with an excuse for failure, an alibi for losses, a constant ground for grouching. Let us consider this matter with calmness and what astuteness we can muster.

If some weed grew in your garden which no known poison seemed to be able to kill and which grew again and again no matter how well rooted out, wouldn't it be a good idea to render the soil inhospitable?

That can be done with sporadic, mushroom competition. Anyone with a tray or two and a dollar's worth of chemicals can start in business as a Photo-Finisher. Skill, you say, and training! Pardon my smiles, that is the very crux of the matter. How much skill have you? How much training did you get before you started and how well are you keeping yourself in training now to be abreast of the times?

The cure of our worst complaint is easy and simple. I have spoken of it before. I stressed it in Detroit at one of the conventions. By becoming so careful, so efficient, so conscientious that training only could make another your equal, make Photo Finishing a difficult profession. By equipping with machinery so modern and complete that your work can be turned out better and quicker, make the requisite investment so large that no impecunious



## CAMERA CRAFT

drifter can butt in with three trays and a bottle of Rodinol.

But if you are turning out stained and half-washed negatives, and over or under-exposed prints that fade or spot, the overnight competitor will not only find it easy to enter the field against you, but very likely will be your successor in your field.

Standardize your products. Standardize your quality. Standardize your deliveries. Make the best quality and the best service the basis of that standardization. Only machinery of the latest and best will assure equal production with the best in the shortest time, at the least cost. Only a strong association functioning as your association and not as a subsidiary of any manufacturer or manufacturers will standardize your understanding as to what constitutes a living profit and how to get it.

Summarizing we may say that your association, if you keep it clean of outside, interested influence and inside sordidness,

will keep you of one mind, standardizing your viewpoints to that of the best service and products for the best price within the right. That your machinery, in the degree in which it is up to the minute, complete in its equipments, will standardize the excellence of your work. There is nothing like machinery for equalizing quality.

And in closing let me give the small-town man something to ponder upon. As the gun made the pigmy a giant able to cope with unarmed giants, so will machinery make the smallest Photo Finisher able to cope with the competition of the biggest and remote finisher, who may be equally well equipped, but can be no better.

The gun makes men of equal power in one way. The gun doesn't care how big or how small the man who shoots it, or how big or small the man at whom it is shot. The machine doesn't know or care how small your capital, or how rich your competitor. It just grinds out the work.



Ye Editor Retaileth Neues of Ye Profession and in Quaint Italics Titillateth Ye Sphynx with Hys Quill

### Commercial Photographers of Los Angeles

The meeting on October 18 of the Commercial Photographers' Association of Los Angeles, Cal., was a live one. We had a good attendance of members and a number of visitors as well.

There were some very good speeches made and letters read. Mr. M. F. Weaver's speech was exceptionally good on flash-light and banquets.

We had an interesting letter from the New York Commercial Photographers' Association, giving us the highlights of their meeting, in the way of new ideas. This was to be in exchange for the same from our association. We were all delighted, and we would like to exchange notes with all other associations in the United States

and Canada or abroad. Please address our Secretary, Fred H. Skinner, 1919 South Hoover Street, Los Angeles, Calif. In this way we can get many ideas that might be just what was needed to make the brotherhood of photographers flame into a real blaze. The idea came from Mr. Henry D. Cotter, secretary of the New York Commercial Photographers' Association.

Our association's dinner was well attended at the Masonic Club.

### Camera Craft Universal Meter

There are many meters on the market for the estimation of exposures. These are in the main reliable and worth their price. Probably the most popular of the slide-rule sort are devoted solely to either one or the other of two uses, for still or for motion pictures. The Camera Craft Exposure

Meter is, like all Camera Craft productions, not just one thing more, but has been carefully devised to fill an existing need. It is not only accurate and simple, but applies to both motion and still photography. Its tables of plate and film speeds are based on the products of today, and were arrived at from materials on the market now. The meter comes in a substantial cloth container, accompanied by a booklet that is a veritable manual on exposure. Complete for \$2.00, from your dealer or through Camera Craft Book Service.

## Miss Pritchard

This sweet - mannered, even - tempered lady is George Derbfus' partner in a large and prosperous business. She is so retiring that her importance to the firm may sometimes be passed over, but, as George frequently avers, "She is the brains of our business and the restraint on my impetuosity." Be it as it may, when partners speak so well of one another there is great merit on both sides, and a united front brings success.

## Al Buehman

Mr. Al. Buehman is a prominent photographer of Tucson, Arizona, and varies the work and art of his profession with the lighter task of being secretary and treasurer of the Old Pueblo Baseball Club. Like many able men, and certainly like most successful ones, he learns and seeks to advance as he lives. Having finished the course at the Winona Summer School he returned to his home town better equipped to offer his clients the latest as gleaned from the eminent men of the eastern centers. May his kind increase.

## Photographers of Northern California

The annual big event of this association took the form of a repetition of the last year's Sunday Supplement Rotogravure spread and to it was hooked the advertising of the members who had contributed to the cost thereof. A banquet, during which addresses by certain members were broadcast over KYA, in which the serious program was diversified with excellent music, made the whole of almost national and certainly of coast importance. It was in fact a valuable contribution to the great campaign to further the interests of the professional through the exploitation of his profession.

The full page of rotogravure pictures made a beautiful display, equal to a half-million show windows, and in one instance the results were so immediate that within two days one portraitist received a hundred-dollar order. The program in detail follows, and from its own impressiveness will need no praise. It went over big. Those present enjoyed it and profited by it. The listeners on the air must have numbered into the hundreds of thousands, and it is not difficult to conceive that photography received an impulse onward and upward.

There was, as an additional attraction and publicity factor, an exhibition of portraits, commercial prints, and pictorial work loaned by the Pictorial Photographic Society of San Francisco, consisting of masterpieces from all over the world as well as from their own group.

The large showing of Anne Brigman's epic works received universal appreciation. A crowd could always be seen before her place on the walls. The pictures by P. Douglas Anderson, John Paul Edwards, G. H. S. Harding, and Anson Herrick were those which had been shown at the International Salon and gave the public in general and the professionals an opportunity of seeing how progressively the advanced amateur had carried photography into the realms of high art.

Loan collections through courtesy of Sigismund Blumann of the works of Louis Goetz and several European and Eastern artists were hung. Between three and four hundred visitors attended this exhibition, for which invitations had been issued, and this number might have been swelled materially had not known photographers and members been excluded from the count. Only laymen of the general public were figured.

The banquet was such as might be expected of the Clift Hotel and the service was gloriously different from what one has been led to expect of such affairs.

The program was opened by Mrs. Elvira Johnson with two piano solos: "Irish Tunes From County Derry" by Percy Grainger, and "By the Waters of Minnetonka" by Lieurance. This was followed by two soprano solos rendered by Florence

Lancaster Hertzog: "Out of the Dusk to You" and "Star." Then came a general talk on "Commercial Photography" by Laurence Morton. As Mr. Morton was ill, it was read most effectively by Mr. A. W. Grieve, business engineer. Mrs. Hertzog then sang "Dawn" by Waver and "Come to the Fair" by Schubert. Kathleen Dougan struck a charming note in her paper on "Portrait Photography," and was followed by Mrs. Hertzog with "Calm as the Night" and "The Trout," and the program closed with two piano solos by Mrs. Johnson, "Deep River" and "Auf Wiedersehen."

The talks were unusually strong in matter and interesting in eloquence, Mr. Morton taking, most appropriately, a business manner of treatment with definite data and applications, and Miss Dougan almost poetically approaching her subject historically from the time of the Ptolomys and carrying it to present-day child portraiture.

Th excellence of the music goes without saying. Mrs. Hertzog is one of our prominent vocalists, and Mrs. Johnson a pianist of charming personality and sympathetic rendering. Their selections were aptly made.

After the program the election of officers brought Miss Mabel Spencer into the president's chair. She had to be forced to accept and dragged to its occupancy, but being in we know we shall have a live, constructive administration. Sergeant John P. O'Callaghan became first vice-president, and that assures an infusion of wholesome humor into future proceedings. Mr. Tracy Webb was elected second vice-president, and that gives us genial dignity, too. Miss Olga Dahl remains treasurer. This is a permanent job for Olga, for no better conservator of our finances, more accurate, equally willing worker could ever be found. The directors are Kathleen Dougan, William Horace Smith and Wanda Stolte, which guarantees the affairs of this organization shall be in good hands.

Ex-President Lancaster, after two and a half years of active service in which he had missed at most two or three meetings, and then through illness, received the encomiums due him with modesty and retired with grace.

All in all it was a great affair, successful in each of its elements, and as a whole leaves us with an increased ambition to do it again and do it ever bigger and better, if we can.

We in these offices glow with a peculiar pride and satisfaction in the knowledge that the entire project was, from its inception to its complete success, carried on the shoulders of Ida M. Reed. She, in her turn, is happy to feel she had such willing and enthusiastic co-operation from all those who lent every faculty to putting the thing over with a bang.

## Ralph Young in Hospital

It will create general distress to know that genial Ralph has been confined to a bed in Saint Luke's Hospital where he had to undergo an operation, less dangerous than painful. We are, however, rejoiced to learn he is resting at ease as we go to press, and expects to be up and doing before this reaches the readers' hands. When Ralph Young is not where we can meet him and bask in his smile regularly, the world is by that much less cheerful.

## Allen Young on C. C. Staff

Mr. Allen Young became connected with Camera Craft on or about October first and will be in complete charge of circulation, sales, book service, and general office efficiency. His capabilities will evince themselves immediately and his courtesy and geniality are an asset not only to the business but to us in these offices add to the day's pleasure.

## Atelier Judith Exhibition

That consummate little artist Miss Judith Martinez exhibited a collection of her portrait miniatures from November 14th to 24th in her studio, 358 Sutter Street, San Francisco. Hung with the hand painted gems were also some of her portraiture in moderne, verde, and cobra tones. The showing was excellent, as might be expected, and was attended by some of the best people. Our best wishes are added to the assured success that must wait on her art, ability, and perseverance.

---

*The years may come and the years may go, peoples and scenes change, but Photographs Live Forever.*



# NOTES & COMMENTS



## Joseph Schneider Honored

Through the courtesy of Burleigh Brooks we recently received a copy of a Kreuznach, Germany, newspaper, which tells of the high honor conferred upon Joseph Schneider, who founded the lens manufactory of Joseph Schneider and Co. He was constituted ehrenburger, or honorary citizen.

As a former resident and alderman of Springfield, Ohio, his distinction gained in Germany comes as a confirmation of the judgment of the American community. And the present achievement is the more remarkable in that all political parties, including the Communistic, united to make it unanimous.

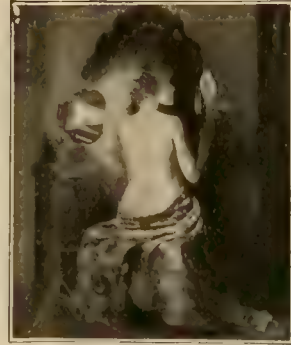
To mention business in the same breath with such things may seem sordid, but to us comes a deduction that a man who can so impress two remote peoples and all parties could never be capable of producing other than the best merchandise.

## Anso Royal Cameras

When you see the new Royal Readysset Anso with its ostrich hide cover you will forget you have a camera already and buy it. Purses, cardcases, everything in leather is now being made of ostrich hide, and added to the value of this instrument, which is always in focus, always set, is the fashion and beauty of its dress.

## Paul W. Hollingshead

Innate ability, like good wine, needs no bush, yet in introducing a new man to a strange clientele it may help to say that Mr. Hollingshead was for years associated with Edward Steichen of New York. At 465 Geary Street, San Francisco, he is now in fully equipped studios prepared to make portraits of high quality and advertising illustrations of the latest fashion in the Eastern manner. The location is central and the telephone, FRanklin 5164, puts him next door to you, wherever you may be.



## Sunbeam Ultra Violet Lamp

Beside the photographic value of the Sunbeam lamp as made and sold by Burke and James, 223-225 West Madison Street, Chicago, Illinois, there is an added value in its application to therapeutic treatment. With ultra-violet carbons made especially to fit this lamp, it is claimed to confer the same curative and stimulative benefits accruing from absorption of sunlight. Thirty minutes' exposure of the body to such light will make the most jaded and overworked photographers as fresh as a daisy. After the strenuous pre-holiday period a sun bath under the Sunbeam lamp will save many a day lost through exhaustion, and take the place of like time spent, perforce, on vacation.

## Glunz Camera

A complete line of these unusual instruments is now available to the American public through the enterprise of Burleigh Brooks, 136 Liberty Street, New York. This is the first time that they have been stocked in a comprehensive way. We are informed that at the comparatively low prices quoted in the catalog, really first quality cameras and with high-grade anastigmat lenses are now obtainable by a large contingent who have awaited the chance to buy within their means. Burleigh Brooks offers them on approval and offers to take back from any buyer who

does not find them the most satisfactory value.

## Crystal Stipple

If you can poetize over a sheet of paper here is the piece of paper to exercise your faculty upon. Perhaps, if you be a purist, you will prefer it to read. Here is a piece of paper upon which to exercise your faculty. But language is not in question. Make a print upon Crystal Stipple in white or buff stock and prepare to sing. The picture will sing for you. Sparkling pinpoints of light blended into a shimmer like moonlight. And the image in rich velvety black. But why strive to reduce to words what only experience can hope to bring to you. Try Crystal Stipple today. It is an Afga-Ansco product.



## Wollensak Outdoor Kit

To decide definitely upon a kit suitable for the outdoor man and boy, the Wollensak Optical Company of Rochester, N. Y., have made a survey among a number of outdoor men and boys to determine just what articles are most needed and useful to the outdoor enthusiast.

The result of this investigation showed that a compass was the most needed item to outdoor folks. So this was included in the kit—a dependable instrument manufactured and guaranteed by Wollensak. Then another requirement was a knife, which was added to the kit; a stag handle pocket knife of sturdy construction with one large keen cutting edge, can and bottle opener, reamer, screw driver, punch and a clip for fastening to the belt a really useful tool. Opinions proved that a telescope was a very useful instrument, and for this, Wollensak had the article, the Pockescope

Sr., the six power pocket telescope for easy and clear observation of distant animals and objects. For the fourth article, it was decided that a pocket magnifier would be desirable, one suitable for the examination of minerals, the texture of leaves and animal matter, fine print, etc. This suggestion brought the inclusion of a five power pocket magnifier mounted in an imitation tortoise shell rim and enclosed in a genuine leather holder. This magnifier serves admirably as a burning glass, also.

The four practical, useful articles are done up in a beautifully decorated, colorful box. As a Christmas gift to the fellow whose interests "lie beyond the ranges"—in other words, as a gift to a man or boy who likes to get into the woods now and then—this very handy little outfit will indeed prove appropriate and worth while.

## Leonard Westphalen Direct Sales

After December first this firm announces that all Westphalen products are to be sold direct to the consumer. Among the many splendid photographic things marketed by Leonard Westphalen none have met with better response than Little Sunny Twin Arc Lamp. It is designed, primarily, for amateur movies and gives fully exposed negatives at f3.5 with one of the lights 8 to 10 feet from the subject. So efficient a light commands attention for those who would use it for stills. It is semi-automatic and takes White Flame or Panchromatic carbons. The price, \$25.00 is not the least of its recommendations and we are assured that notwithstanding the low figure the lamp has not been built down to a price. A request to Leonard Westphalen, 438 Rush Street, Chicago, Illinois, will bring you instructive literature on this and other subjects.

## Gevaert Products

There is a peculiar quality to Gevaert products that appeals to the ultra-careful and high class photographer, be he amateur or professional. Gevaert papers are remarkable. Gevaert plates outstanding, Gevaert Roll Films exceptional. Have you tried them? Remember the name Gevaert, and if you want to be right, call it GAY-VERT.

## **The Brooks Cine Focusing Prism**

In this era of motion picture photography, and the many varied accessories offered for it, it seems strange that until now there has been no attachment for the 16 mm. camera, by the aid of which one could focus with the lens screwed in place.

Burleigh Brooks, 136 Liberty Street, New York City, has, we believe, a very simple and efficient solution of the problem. This is a simple glass prism ground on one side, which fits into the camera at the film gate (with the Victor camera it is advisable to loosen one screw and remove the gate). The image can then be seen clearly and brilliantly enough to check the focus of different lenses and compare them.

This prism makes it unnecessary to make trial pictures to test a lens and is a boon to dealers. The retail price is only \$6.00, post paid.

## **Ralph Young Studios Move**

When Ralph Young advertises his own business he advertises his ability to put over something unusual, something exceptionally strong. The circular which announced the removal of the Ralph Young Studios from 419 Sutter to 443 on the same street, same side, same block, consisted of a silhouette of the force moving cameras, plates, tripods and all sorts of para-

phernalia, down a flight of steps. The caption begins with Another Move, dramatized by Photographic Illustration, and goes on to say "Tramp, Tramp, Tramp! Down the stairs at 419 Sutter Street. Tramp, Tramp Tramp! Up the stairs at 443 Sutter Street." It is a clever piece of publicity. The new studios, by the way, are about twice as large as the former; every item of equipment has been brought up to the minute, and the place was built to order and is adapted in every particular to the business. An invitation to visit is hereby extended to our readers.

## **Amateur Enlarging**

John P. O'Callaghan, Staff Sergeant, Fifteenth Photographic Section, Air Corps, U. S. A., has written a book on enlarging that is meant for the amateur; has been carefully planned and executed for the amateur, and has in no wise been permitted to go beyond the everyday use of the amateur. It is no less complete, within its scope for that, and it is far more useful for being so free of complicated directions and unusual procedures. The book is well printed and substantially bound in red cloth and sells for fifty cents. A value is given in that which will astound our readers. Sergeant O'Callaghan has done a good job and his pleasant personality is reflected from every page and Camera Craft Publishing Company has maintained its standard.

# International Photographic Association

It is with regret that CAMERA CRAFT announces that the Circulating Album feature of the I. P. A. is to be discontinued. In the past this activity of the Association enjoyed great popularity but in recent years interest in the Albums has gradually waned.

The explanation of this change of interest is merely the story of the progress of photographic art in this country. In former days the Albums were the only means of viewing directly the work of others, but today with the great increase in the number and quality of Salons and other photographic exhibits the opportunities for seeing the pictures of other workers have grown tremendously. On the basis of these facts we have reached the conclusion that the Circulating Album has outgrown its period of usefulness.

The announcement in no way affects the Exchange function of the I. P. A. We should like to request that any apparent neglect on the part of a member in exchanging prints be reported to us, as it sometimes happens that prints are lost in the mails causing a misunderstanding between members that we are able to adjust to the satisfaction of both parties. The object of the Exchange function of the I. P. A. is twofold. To provide a means of exchanging prints and at the same time to protect all members from unfair practices.

G. A. Young, Album Director.





### **The British Annual**

If the British Annual of Photography were not indispensable to us, you and me, I should still love it for its institutional character and for the connection with it of Mr. Brown, editor thereof, and of the British Journal. Brown is an inspiration and one of the rather obsolete type of genus gentlemenus. The Annual is indispensable. Naturally so important a book is generally sold out sometime in advance of the procrastinator's awakening to his want. It is to be advised, therefore, that you order from your dealer or through Camera Craft Book Service in advance of its issue. Price, paper, \$1.25; cloth bound, \$1.75; postpaid.

### **Cuba and Her People of Today**

We have on several occasions enthused over the issues of L. C. Page and Company. Their "See America First" and "Spell" series have given us much joy. "Cuba and Her People of Today" is an unusually beautiful volume as it comes to the hand. A heavy blue-black cloth binding embossed in colors and gold, gold top leaves, and even a jacket of heavy art paper that enhances the book. But, of course, the contents are of prime importance, and of the text we can say that Forbes Lindsay and Nevin O. Winter have once again succeeded in making more or less didactic material as interesting as narrative. In fact, as we read the present volume, we were anew impressed by the charm of their narrative faculty.

We might masticate volume after volume in our reviews and present the reader with a predigested impression which should, when all is said and done, still be our impression. So we prefer to stimulate your interest and speak here of such books only as we feel you will enjoy and find worth while. This one may be summarized as historical, industrial, topographical, and humanly descriptive. It carries 48 plates and two extended maps.

### **Corporation Secretary's Guide**

There may be a photographer who intends forsaking the field of his art to become a secretary. Some may be impressed with the possibility of becoming a secretary to the local Chamber of Commerce or Board of Trade. Whatever the interest in the subject, the above book will start him right, set him right, and keep him right. William E. Crow, A. B., LL. B., has given them an authoritative guide. Incidentally he has produced text that men who have no secretarial ambitions might read and study with advantage to their style, in spoken and written English, to their approach in social and business intercourse, and to the production of such amenities as make life sweeter. Published by Prentice-Hall, Inc., and supplied on order through "Camera Craft" Book Service.

### **A More Than Valuable Book**

More than valuable means invaluable, indispensable. "How to Make More Money From Portrait Photography" is a volume issued by the National Advertising Campaign as a part of its "Plan and Prosper" campaign. It has always been our contention that education of the profession is as essential as educating the public. It is well for the public to know they should want portraits, for instance, but it is more essential for the photographer to know how to make them know it. What impresses us in this book is the care with which it has been prepared and the foresight of the makers in selection of the material. The "Portrait" book and the "Plan and Prosper" book form one of the best combinations in proof of the value of the whole advertising campaign. Members of the National Association should be more convinced than ever that the convention is only a once-a-year part of the functions of that body and that monthly, yes daily, benefits accrue to them from their affiliation, which they could get no other way.

## Handling and Mixing Photographic Chemicals and Solutions

Handling and Mixing Chemicals and Solutions in nowise falls short of what we should expect and invariably find in John Tennants books. The photographer needs just what this little number gives him. The cost (40 cents) will be repaid with tremendous dividends by the saving in obtention of better solutions, and from the waste through improper compounding. Do not fail to get yourself a copy forthwith at your dealer or through Camera Craft.

## The Photofreund Annual

An art book that is so beautifully printed and contains so many great pictures as to become a gift book for any occasion and for persons interested or not in photography, itself. Nothing finer has appeared for some time and the pictorialist will find between the heavy cloth covers a veritable school in figure and landscape work, with sidelights on pure pattern and its rational applications. Priced at 6.80 RM from the publishers, Verlag Guido Hackbeil, Berlin, or from Camera Craft Publishing Company.

## Adoniram

Books of fiction are not often reviewed in these columns but recently we happened on a work that will repay any reader. Not since Bulwer Lytton wove into two of his novels the mysticism of ancient Jerusalem has a story dealt so quasi-historically with a romantic period in the world's history, that period which covers the Solomon era and took in the advent of the Queen of Sheba into the traditions of the Jews.

The very title is awe-inspiring. Adoniram suggests the Adonai of the ancient Jews, the Adonis of the Greeks, though in this story he is human and we think meant to personify under another name the great architect whom Master Masons accredit with the building of the great temple. It is a gripping story, this, flavored richly with semiticisms as to style and viewpoint.

Materially, the volume is ambitiously bound in leatherette of a mottled maroon and beautifully embossed in gold, the paper is of the best and the typography faultless. It can be supplied by the Camera Craft Book Service.

## The Complete Press Photographer

The subject appeals at a glance and the book lives up to the most that may be expected of it. And that is a great deal, for Bell R. Bell has covered every sub-head, every phase of a hitherto neglected branch of the photographer's profession in a way that leaves nothing to be desired.

Beginning with the character of Press Photography, the text deals with Equipment, Dark Room, Plan of Campaign, Manipulations, Writing Up and Circulating Prints, the Market, Selling Methods, and so-forth, even detailing the leading Papers and Journals which buy photographs.

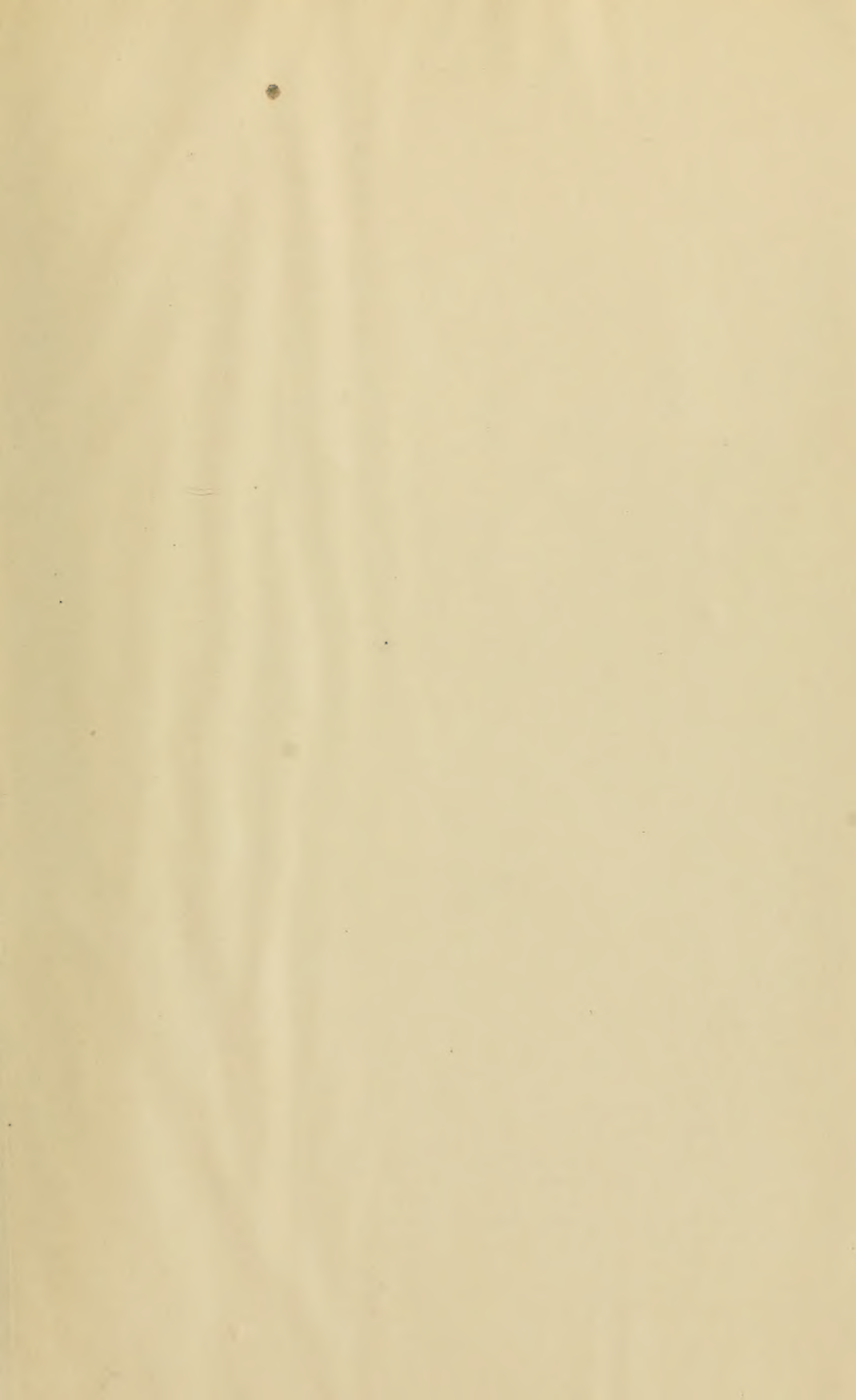
Bound in maroon silk cloth, heavy board covers embossed in gold, 188 pages priced at \$2.50 and published by Isaac Pitman and Sons, New York.

## The British Annual for 1929

This international bulwark of photography, like the British Journal, always comes to hand with a wealth of material that gladdens the photographer in whatever branch of the art and craft. The prospectus of the forthcoming annual reads so temptingly that we, accustomed to wading through books and periodicals, feel a keen impatience for its appearance on our desk. When it comes it gets an immediate once over and is carried from office to home and back again, to be read on cars, trains, and boats, as we commute to and from home to business. That is only a mild statement of our feelings toward anything the British Journal fathers. The annual is always oversold and many are disappointed in not finding a copy left by the time they get ready to buy one. Order yours now through your dealer or Camera Craft and be assured of an early copy.

## Photograms of 1929

Those who enjoy real pictures made with the camera look forward with something like impatience to the coming of Photograms. It carries a live and intense interest for the pictorialist since he or his friends may be found represented amongst the honored on its pages. This year's issue is fully up to standard and \$3.50 is a cheap price for so much loveliness. Your copy may be obtained through the Camera Craft Publishing Company.









446



